# NARROWING THE GAP: MINORITY HEALTH IN TENNESSEE

Division of Information Resources
Tennessee Department of Health and Environment

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# NARROWING THE GAP: MINORITY HEALTH IN TENNESSEE

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# FOREWORD

In January, 1988, the Tennessee Department of Health and Environment published *The Status of Black and Minority Health in Tennessee.* The report highlighted differentials in mortality between the minority population in Tennessee and their white counterparts.

The Tennessee Department of Health and Environment continues to be committed to improving the health of Tennessee citizens from birth and throughout their life spans. This report outlines not only mortality data as in the previous report, but presents statistics from various sources on the status of minority health.

The Department's earlier report was modeled after the *Report of the Secretary's Task Force on Black and Minority Health,* published in August, 1986, by the U.S. Department of Health and Human Services under the leadership of Secretary Margaret Heckler. This new document reflects elements of the 1990 Department of Health and Human Services publication, *Healthy People 2000: National Health Promotion and Disease Prevention Objectives.* The Year 2000 Objectives for the Nation provide a national strategy for improving the health of the United States over the coming decade and highlight the need to "Narrow the Gap" in the differentials in mortality and morbidity between black and white populations.

Due to current trends in baseline data in Tennessee compared to national data, some of the national targets for the year 2000 are unrealistic for our state. However, we will seek comparable improvements in the proportion of rates at a percentage similar to those proposed by the national objectives.

Additional information may be obtained on request.

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# INTRODUCTION

Anthony and Vanessa were born in 1990. Because they are African-American babies, they face high risks of premature death and a shortened life span. They are twice as likely as white babies to die before their first birthday and continue to be at risk of injury and health hazards throughout childhood.

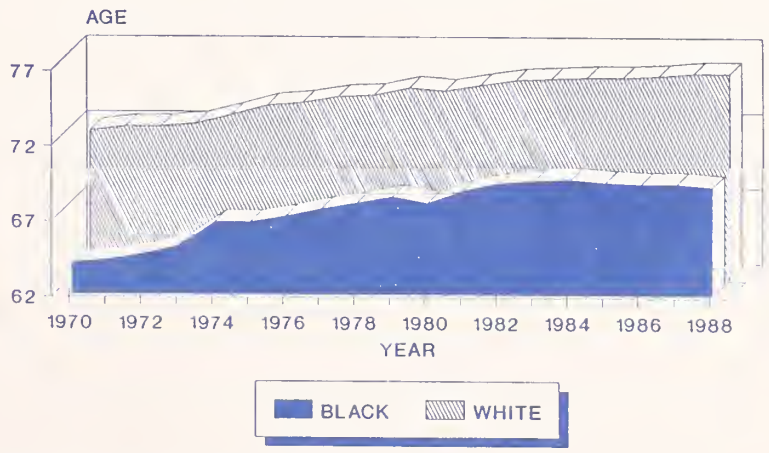
But the differences between the chances of poor health for blacks and whites will not end for them as children. Preventable diseases and the specter of early death from heart disease, stroke, cancer, homicide, diabetes and other causes will haunt Anthony and Vanessa throughout life. As they grow older, both African-American men and women will be at greater risk of chronic diseases related to lifestyles and health habits than their white counterparts.

For example, Anthony will be more than twice as likely to die from prostate cancer as a white male. He will have a 1 in 21 chance of being a homicide victim, compared to 1 in 131 for white males. His risk of violent death is greatest during his teens and early twenties.

When Vanessa becomes 10 years old and through her teen years, she is at very high risk of becoming pregnant, perhaps more than once. Single parenthood may doom her and her children to the lockstep cycle of poverty. Prior to age 40, she is at high risk of breast cancer. During her forties Vanessa may be among the 1 in 3 black women who are overweight. Her obesity can lead to an overwhelming danger of developing breast cancer, diabetes, or hypertension, with the result of disfigurement and premature death. If she lives to be very old, she is likely to die in a house fire.

In an effort to highlight those health-related areas in which minorities suffer disproportionately, this report was prepared at the request of the Black Health Care Task Force, commissioned by the Tennessee Department of Health and Environment.

LIFE EXPECTANCY AT BIRTH BY RACE,
UNITED STATES, 1970-1988




Source: National Center for Health Statistics, U.S. Department of Health and Human Services

# POPULATION

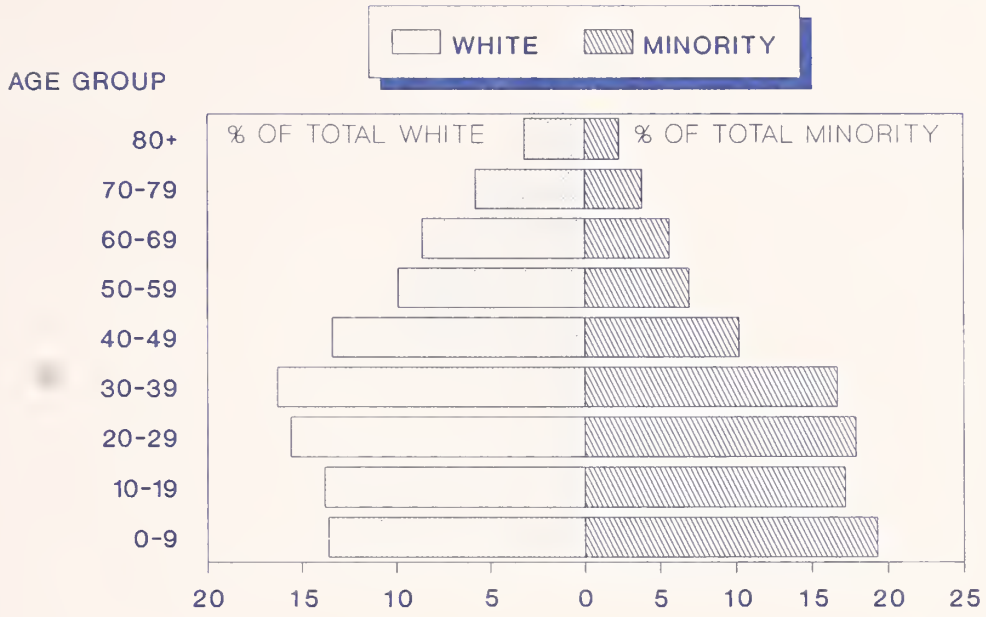
## POPULATION

According to the 1980 census of the population in Tennessee, 83.6 percent was white, 15.8 percent was black, and only 0.6 percent was other races.

Currently, five out of every ten minorities are under the age of 30 years, compared to four out of every ten whites.

PERCENT DISTRIBUTION OF TENNESSEE'S POPULATION ACCORDING TO THE 1980 U.S. CENSUS

# PERCENT DISTRIBUTION OF POPULATION BY AGE GROUP, TENNESSEE, 1989



# LIFESTYLE

## LIFESTYLE AS A HEALTH RISK

Since 1984, the Tennessee Department of Health and Environment has conducted a random-sample telephone survey of adult Tennesseans to determine prevalence rates on a number of risk factors which are causally linked to premature mortality and morbidity. Rates reported here have been aggregated for the 1987-1989 surveys. All prevalence rates for blacks and whites as well as for minority males and minority females represent an average of the weighted rates of those three years. Blacks comprised 86.7 percent of all minorities surveyed during the period.

**Tobacco usage.** Tobacco use is the most preventable cause of premature mortality and morbidity in the United States and in Tennessee. Although blacks have consistently reported lower prevalence rates for being a current smoker (26.7 percent) than white respondents (28.8 percent), the difference is not statistically significant. More importantly, Tennessee minority males report being current smokers at a rate 55 percent greater than minority females.

**Obesity.** Obesity is a risk factor for heart disease, cancer, stroke, and diabetes. Almost one-third (32.1 percent) of blacks are at risk of being severely overweight, compared to 23.8 percent of whites in Tennessee. Among minority females, 33.4 percent report being overweight compared to 25.9 percent of minority males.

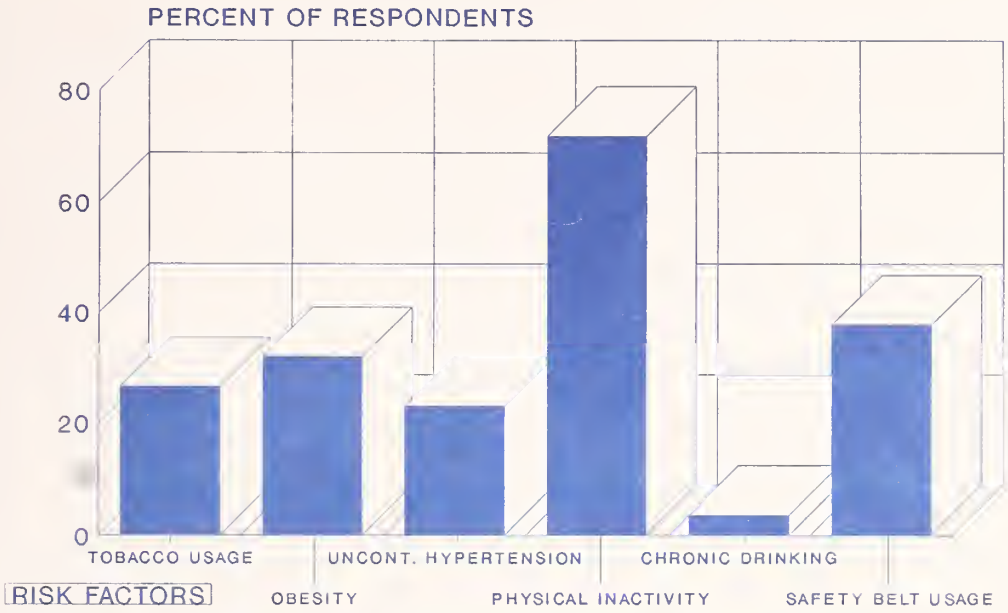
**Uncontrolled hypertension.** Uncontrolled hypertension is a well-known risk factor for cardiovascular, cerebrovascular and end-stage renal diseases. Approximately one out of four adult blacks (23.1 percent) reported in the survey that they had been diagnosed as hypertensive but were not under control at that time. The comparable percentage for whites was 18.7. Minority females reported an uncontrolled hypertension rate of 25.3 percent, a figure larger by half that for minority males (17.7 percent).

**Physical activity.** Physical activity, even at a moderate level, has been shown to reduce premature mortality. A sedentary lifestyle is a risk factor for coronary heart disease and diabetes. Of all blacks responding to the survey, 71.8 percent reported they did not get at least 30 minutes of moderate physical activity at least three times a week. It appears that minority females are more at risk for a sedentary lifestyle than minority males (74.4 percent and 65.2 percent, respectively).

**Chronic drinking.** Chronic drinking, defined as having 60 or more drinks within the previous month of the survey, is a risk factor for cirrhosis of the liver, violence, accidents, and transmission of the HIV virus. During the survey period, 3.6 percent of blacks reported chronic drinking, a percentage identical to white respondents.

**Safety belt usage.** Although all Tennesseans are using safety belts more frequently than in the past, 37.9 percent of all blacks still report usage only sometimes, seldom, or never.

## THREE-YEAR AVERAGE DATA FOR SELECTED BEHAVIORAL RISK FACTORS FOR MINORITIES, TENNESSEE, 1987-1989




Source: Behavioral Risk Factor Survey

## HEALTH AND SAFETY BEHAVIOR AMONG CHILDREN IN GRADES 3, 4, AND 5, 1989-1990

The need for population-based data on health and safety behaviors has become more urgent in light of the contemporary increases in substance abuse and misuse, teen pregnancy, risk-taking behavior, suicides, accidents, violence, and other health and safety concerns afflicting a significant number of adolescent and school-age children. In response to this need, the Tennessee School Health and Safety Profile (TSHSP) was conducted in selected Tennessee public schools during the school year 1989-1990.

The survey was a statewide project to assess the health and safety behavior of school-age children in the third, fourth, and fifth grades. The goals of the TSHSP were fourfold:

1. To help raise individual student awareness of personal health and safety behavior.
2. To encourage discussion and open communication between parents and children regarding health and safety behavior.
3. To assist classroom teachers and administrators in knowing more about their pupils' health and safety behavior.
4. To assist students, parents, teachers, and administrators in raising the awareness of the importance of maintaining a healthy and safe home and school environment.

For the first time in the state of Tennessee, valid data covering a broad range of health and safety behaviors of school-aged children was collected.

**Risk factors according to race.** White students had a higher percentage of poorer health habits in the following health and safety risk factors than students who were black and other races:

- Carry a knife
- Do not know how AIDS is spread
- Do not have a fire escape plan
- Don't brush or floss their teeth daily

Minority students had poorer health habits than white students in the following risk factors:

- Not knowing how to swim
- Almost never play or exercise
- Watch TV/video games 6+ hours a day
- Tried marijuana
- Eat weekly at fast food restaurants
- Don't see dentist regularly

## SELECTED HEALTH AND SAFETY RISK FACTORS BY RACE, SCHOOL HEALTH AND SAFETY PROFILE, TENNESSEE, 1989

| | Race of Students | | | |
|---|---|---|---|---|
| | White | | Black & Other | |
| | Number | Percent | Number | Percent |
| Total students | 733 | 74.3 | 253 | 25.7 |
| Almost never wear seat belt | 76 | 10.4 | 25 | 9.9 |
| Carry a knife | 127 | 17.3 | 25 | 9.9 |
| Don't know how to swim | 177 | 24.1 | 103 | 40.7 |
| Left at home without supervision | 125 | 17.1 | 47 | 18.6 |
| Almost never play or exercise | 43 | 5.9 | 27 | 10.7 |
| Watch TV/video games 6+ hours a day | 127 | 17.3 | 63 | 24.9 |
| Don't get enough sleep | 107 | 14.6 | 51 | 20.2 |
| Ever smoked cigarettes | 26 | 3.5 | 14 | 5.5 |
| Use chewing tobacco | 13 | 1.8 | 5 | 2.0 |
| Drink alcohol | 16 | 2.2 | 6 | 2.4 |
| Have tried marijuana | 8 | 1.1 | 13 | 5.1 |
| Very unhappy with body | 40 | 5.5 | 19 | 7.5 |
| No one to talk to about problems | 58 | 7.9 | 27 | 10.7 |
| Sometimes/often feel life not worth living | 259 | 35.3 | 111 | 43.9 |
| Almost never eat breakfast | 47 | 6.4 | 18 | 7.1 |
| Eat junk food daily | 131 | 17.9 | 50 | 19.8 |
| Eat weekly at fast food restaurants | 69 | 9.3 | 37 | 14.6 |
| Don't brush teeth daily | 163 | 22.2 | 40 | 15.9 |
| Don't see dentist regularly | 203 | 27.7 | 89 | 35.2 |
| Don't floss their teeth daily | 507 | 69.2 | 148 | 58.5 |
| Have not heard of AIDS | 34 | 4.6 | 12 | 4.7 |
| Don't know how AIDS is spread | 377 | 51.4 | 112 | 44.3 |
| Afraid they might get AIDS | 603 | 82.3 | 222 | 87.7 |
| No smoke alarm in home | 171 | 23.3 | 60 | 23.7 |
| No home fire escape plan | 138 | 18.8 | 43 | 17.0 |
| Don't know about 911 | 86 | 11.7 | 25 | 9.9 |

Source: Division of Health Promotion/Disease Prevention, Tennessee Department of Health and Environment

A high percentage in both minority (90.2) and white (82.3) student groups feared they might contract AIDS if a fellow student had the AIDS virus.

For a number of other risk factors, such as safety belt use, cigarette and alcohol use, and self-esteem, the difference in rates between black and white respondents was negligible.

Conclusions. Overall, the health and safety of Tennessee children is rated as fair. There was no statistically significant difference between races and risk groups.

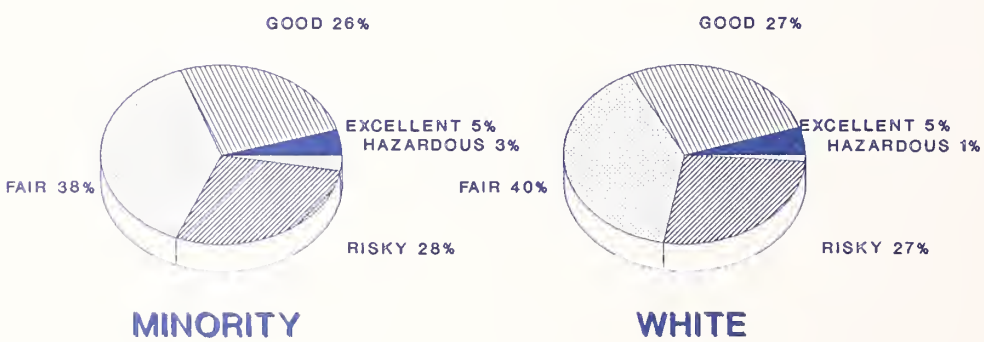
As students progress from the third grade to the fifth grade, they increase their practice of risky health and safety behaviors.

The gender of the students is a factor concerning the practice of risky health and safety behaviors, with the males practicing risky health and safety behaviors more so than the females.

According to the Tennessee School Health and Safety Profile, the race of the students appears not to be a factor concerning the practice of risky health and safety behaviors.

It appears, generally, that the geographical area of the students is an influencing factor concerning the major health and safety risk factors. Students from rural areas appear more likely to practice risky health and safety behaviors than students from urban areas.

## HEALTH AND SAFETY RISK CATEGORIES BY RACE OF STUDENT



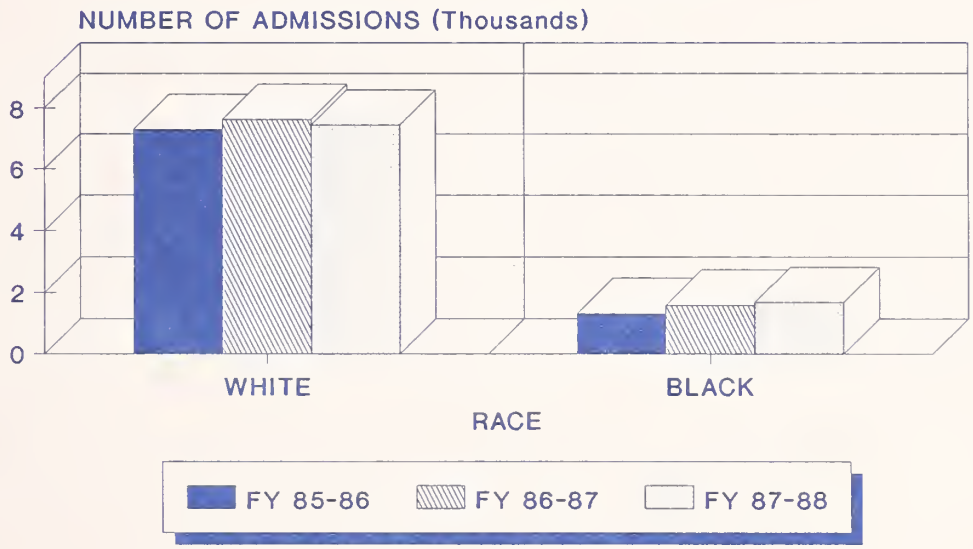
## ADMISSIONS TO STATE-CONTRACTED SUBSTANCE ABUSE TREATMENT CENTERS

The number of black admissions to alcohol and other substance abuse treatment centers increased 27.3 percent from FY 1985-86 to FY 1987-88. Black males were admitted at three times the rate of black females.

Most minority admissions were aged 25-34 years. While alcohol was the primary diagnosis for 63.3 percent of white admissions, the proportion for blacks was only 45.7 percent. In contrast, the cocaine abuse proportion for black admissions was 37.5 percent, compared to 7.7 percent for whites. Over half (52.1 percent) of all admissions for a primary diagnosis of cocaine abuse were black, while 85.8 percent of total admissions for alcohol were white.

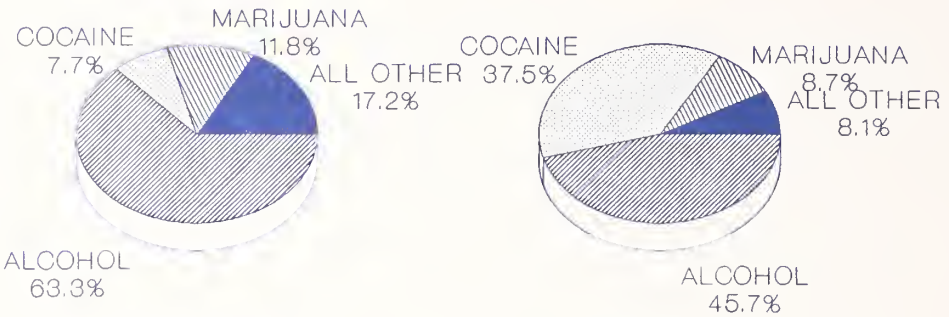
In FY 1987-88, one-third of all black admissions were Shelby County residents. An additional one-fourth were from Davidson County.

### NUMBER OF WHITE ADMISSIONS AND BLACK ADMISSIONS TO SUBSTANCE ABUSE TREATMENT CENTERS




Source: Department of Mental Health/ Mental Retardation

# DISTRIBUTION OF ADMISSIONS TO SUBSTANCE ABUSE CENTERS BY PRIMARY SUBSTANCE BEING ABUSED, BY RACE, TENNESSEE, FY 1987-1988




**WHITE** **BLACK**

SOURCE: DEPARTMENT OF MENTAL HEALTH/MENTAL RETARDATION

## COCAINE-RELATED DEATHS AMONG TENNESSEE RESIDENTS

Cocaine abuse is taking an increasing toll on Tennessee residents. In the three years from 1983 through 1985, there were only 11 total cocaine-related deaths. In 1988 alone, there was twice that number. The toll on the black community is also increasing.

**Race and sex of decedents.** From 1983 through 1985, 54.5 percent of the cocaine fatalities were among white males, declining to 50.0 percent in 1988. Eight of the 22 deaths in 1988 were among blacks, and five of those were black males. Therefore, blacks comprised over one-third (36.4 percent) of Tennessee fatalities from cocaine in 1988, while the proportion blacks currently constitute of the total population is about 17 percent.

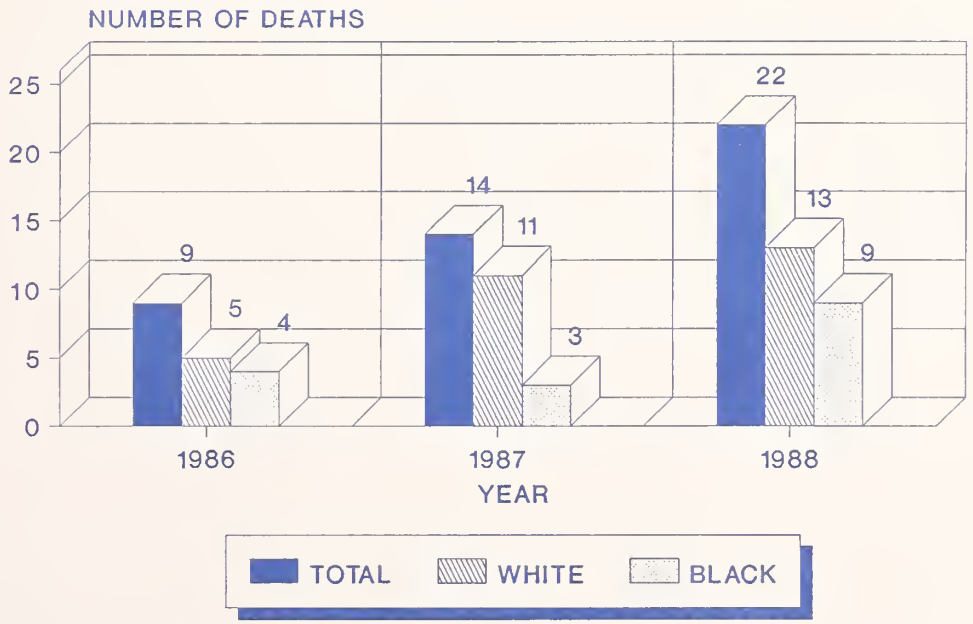
**County of residence.** The majority of cocaine-related fatalities have generally occurred among residents of two counties: Davidson (Nashville) and Shelby (Memphis). For example, in 1987 there were 14 cocaine-related deaths among Tennessee residents. Ten of these were residents of these two counties (71.4 percent).

In contrast, in 1988, Hamilton County (Chattanooga) and Knox County (Knoxville) reported four cocaine deaths each. Shelby reported seven and Davidson three. In 1987, Hamilton and Knox reported no such deaths. Together, residents of the four counties of Davidson, Hamilton, Knox, and Shelby constituted 81.8 percent of the 22 cocaine deaths in 1988.

**Age of the decedents.** The range in ages for white decedents was from 23 years through 42 years. For blacks, the range was 23 through 50 years.

Data from death certificates serve as a proxy measure of cocaine abuse in the state. As abuse rises, the number of deaths will be expected to rise also.

### NUMBER OF COCAINE-RELATED DEATHS BY RACE, 1986-1988



# AIDS

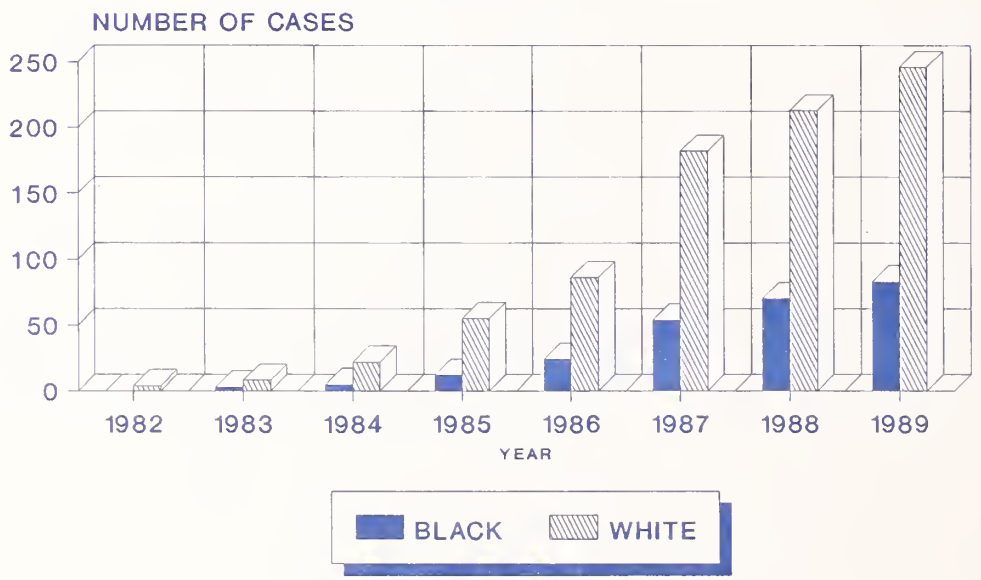
From 1982 until August 30, 1990, there were 1,264 reported cases of AIDS in Tennessee; 320 were among minorities. The 1989 minority case rate per 100,000 population was 9.8. Three-fourths of all cases were among whites. The 1989 case rate for both minorities and whites was 15 percent higher than the rate for 1988.

Of the 320 AIDS cases among minorities, 304 were among blacks, 14 were Hispanics, and two were Native Americans. Black cases began to be reported in 1983, Hispanics in 1986, and Native Americans were reported only in one year, 1987.

Blacks have experienced a fatality:case ratio of 61 percent so far, slightly higher than that of 59 percent among whites.

Eighty-eight percent of the black AIDS cases were males compared to 96.8 percent of whites.

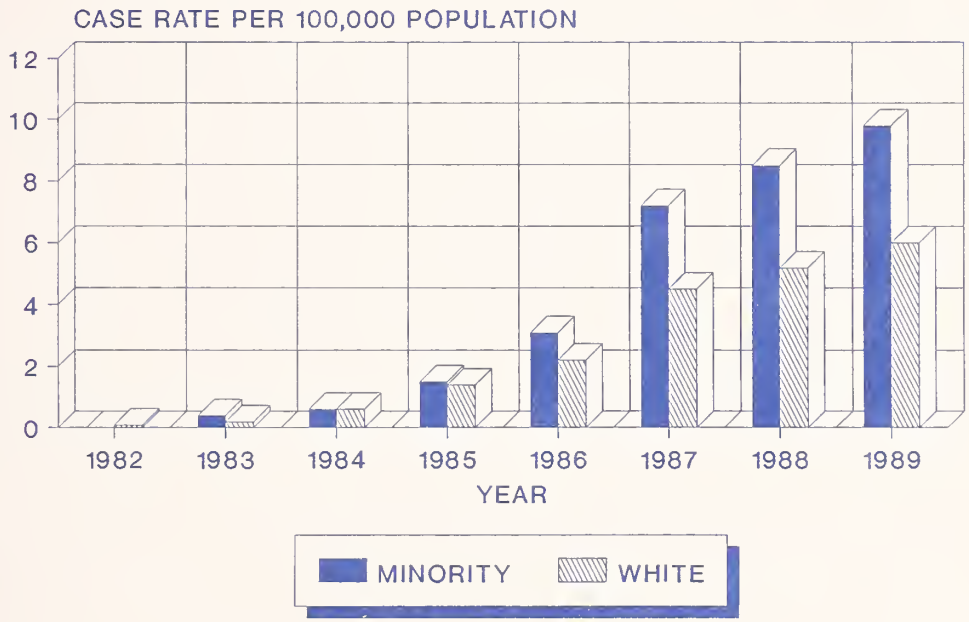
## NUMBER OF REPORTED AIDS CASES AMONG BLACKS AND WHITES, TENNESSEE, 1982-1989



White AIDS patients were more likely to be homosexual/bisexual males (75.1 percent) than were blacks (53.9 percent). Blacks were more likely to report a history of IV-drug abuse (22.0 percent) than whites (5.2 percent). The proportions by race of the compounded risk factors of homosexuality plus IV drug use were similar among blacks and whites (10.2 and 7.2 percent, respectively).

Blacks had higher rates of heterosexual transmission than whites: 6.6 percent for blacks compared to only 2.2 percent for whites. Heterosexual transmission often is indirectly associated with IV-drug use, with an individual becoming infected with HIV through needle-sharing and then transmitting the infection to a sexual partner. Of concern in this transmission pattern is the growing practice of exchanging sex for drugs.

## AIDS CASE RATES PER 100,000 POPULATION, BY RACE, TENNESSEE, 1982-1989



# MATERNAL AND CHILD HEALTH

## SUMMARY TABLE
## OF THE *YEAR 2000 OBJECTIVES FOR THE NATION* TO IMPROVE MATERNAL AND INFANT HEALTH

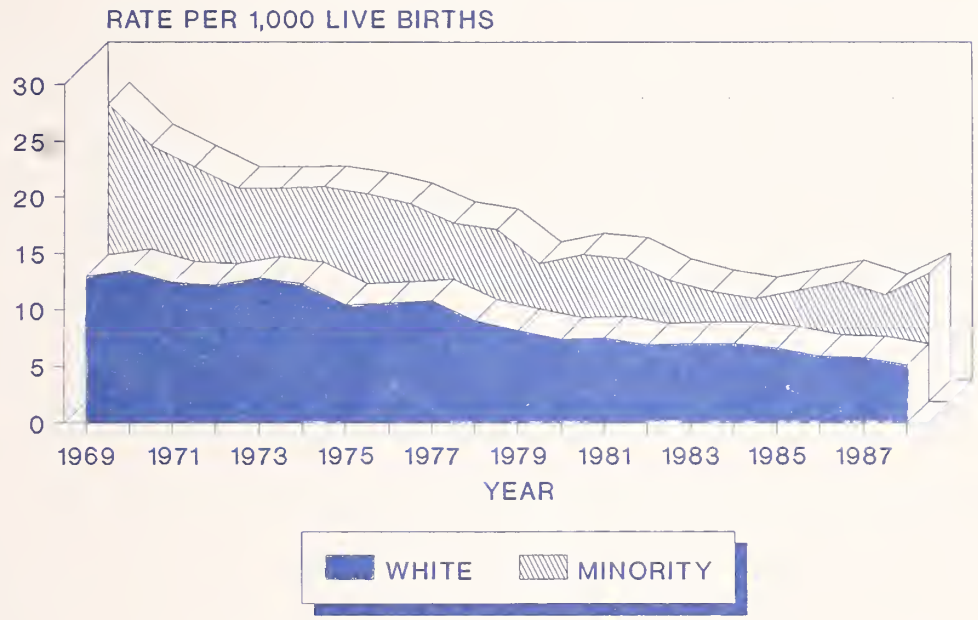
By the Year 2000, the United States should aim to:

- Reduce the infant mortality rate among blacks to no more than 11 per 1,000 live births
- Reduce the neonatal (deaths of infants under 28 days) mortality rate among blacks to no more than 7 per 1,000 live births
- Reduce the postneonatal (deaths of infants ages 28 days to 1 year) mortality rate among blacks to no more than 4 per 1,000 live births
- Reduce the fetal (20 weeks or more gestation ) death rate among blacks to no more than 7.5 per 1,000 live births
- Reduce the maternal mortality rate among blacks to no more than 5 per 100,000 live births to black women
- Reduce low birthweight (less than 2,500 grams) among blacks to an incidence of no more than 9 percent of live births
- Reduce very low birthweight (less than 1,500 grams) among blacks to an incidence of no more than 2 percent of live births
- Increase to at least 75 percent of black mothers who exclusively or at least partially breast-feed their babies in the early postpartum period and to at least 50 percent the proportion who continue breast-feeding until their babies are 5 to 6 months old
- Increase to at least 90 percent the proportion of all pregnant black women who receive prenatal care in the first trimester of pregnancy
- Increase abstinence in the use of tobacco, alcohol, cocaine, and marijuana among pregnant women by at least 40 percent

# FETAL DEATHS

Fetal deaths have declined in number and in rate over the past twenty years. The 1988 minority fetal death rate of 11.3 was a third of the 1969 rate of 33.7. Unfortunately, the differential between whites and minorities has widened somewhat. In 1969, the minority rate was 1.8 times the rate for whites. By 1988, the differential was 2.2.

## FETAL DEATH RATES PER 1,000 LIVE BIRTHS, BY RACE, TENNESSEE, 1969-1988



# TEENAGE PREGNANCY

Teenage pregnancy is a serious problem which adversely affects the social, health and economic well-being of the teenage parents and their children. In 1988, there were 7,129 reported pregnancies among girls aged 10-17 years in Tennessee. Approximately two-thirds of these pregnancies resulted in live births and one-third were aborted.

The majority of teen births occur out of wedlock and result in school dropout for the mother. Teenage girls are less likely to seek adequate prenatal care and more likely to deliver low-birthweight infants than their older counterparts. These low weight babies may die before their first birthday or survive with serious health problems. All of these factors contribute to the likelihood that the young mother will become totally dependent on the medical and welfare benefits of the local, state and federal government. According to *Adolescent Pregnancy: the Tennessee State Plan*, prepared by the Interdepartmental Coordination Council, the public sector cost for all Tennessee families begun by a birth to a teenage mother in fiscal year 1986-1987 was conservatively estimated at over $200 million. This figure includes AFDC, Medicaid and Food Stamps costs but excludes other public costs which can result from teen pregnancy (such as public housing, child protective services and foster care). While public costs can be estimated, it is not possible to put a price tag on the overall economic losses which occur when teenagers and their children do not recover from the setback of an early pregnancy.

The United States has one of the highest teenage birth rates among the developed nations of the world. In 1985, all comparable industrialized democracies (seven countries) had lower teen birth rates than the U.S. Within the United States, the ten states with the highest percentage of births to teenagers are in the South. Tennessee's teen pregnancy rate has been relatively stable over the past 10 years.

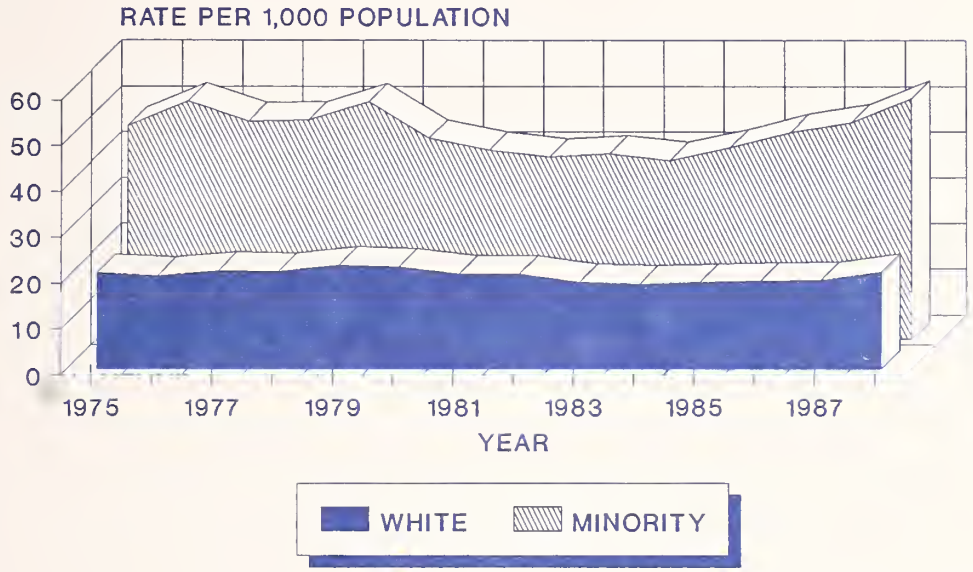
Pregnancies among Tennessee teenagers. In 1988 in Tennessee, approximately 20 teenaged girls aged 10-17 became pregnant every day. This corresponds to a rate of almost one per hour and a total of 7,129 pregnancies. This rate varies considerably within the state but is generally highest among residents of the major metropolitan areas and in the western portion of the state.

Tennessee teenagers gave birth to 4,753 babies in 1988, over 13 per day. Based on national averages, 2,900 of those girls will not complete high school; 364 will not complete even the ninth grade.

In 1988, there were 491 pregnancies among young girls aged 10-14 years; over two-thirds of these were minorities. The pregnancy rate for females of races other than white in 1988 was 9.0 per 1,000 females in this age and race group. The comparable rate for whites aged 10-14 was 1.2 per 1,000.

In that same year, 6,638 pregnancies were reported among 15-17 year old females; 37.7 percent were among minorities. The minority pregnancy rate of 109.5 per 1,000 females was 2.3 times that of their white counterparts.

## PREGNANCY RATES PER 1,000 FEMALE POPULATION AGED 10-17, BY RACE, TENNESSEE, 1975-1988




Pregnancies among Shelby County teenagers. Almost half of the minority female population aged 10-17 years in the state resides in Shelby County. Yet, of all the state pregnancy-related events in minority teens in 1988, over half were to Shelby teens. Proportionately more events occurred than would be expected based on the Shelby County teenaged population distribution among the following:

- Births
- Fetal deaths
- Abortions
- Low weight births to teen mothers
- Illegitimate births
- Births following a previous live birth or other pregnancy outcome
- Inadequate prenatal care
- No prenatal care

For example, almost 60 percent of minority teen births with inadequate or no prenatal care and 52.8 percent of all minority teen pregnancies were to Shelby County teens.

In addition, pregnancy-related events which occur to very young (10-12 years) teens are most frequently among Shelby County minority girls. In 1988, the 10-17 pregnancy rate per 1,000 minority female population in Shelby County was 53.2 compared to 47.5 for the state average. The state minority average without Shelby County's influence would be reduced to 42.5 in 1988.

# PRENATAL CARE

Early entry into prenatal care and an optimum number of visits during pregnancy have been correlated with the reduction of adverse pregnancy outcomes such as low birthweight. Unfortunately, pregnant black women in Tennessee are less likely than whites to seek prenatal care and to receive adequate care during their pregnancies. Mothers with inadequate prenatal care tend to have lower weight infants, higher infant mortality rates, and more complications of pregnancy and childbirth than mothers who receive adequate care. The national Year 2000 Objective for pregnant black women is "To increase to at least 90 percent the proportion of all black pregnant women who receive prenatal care in the first three months of pregnancy."

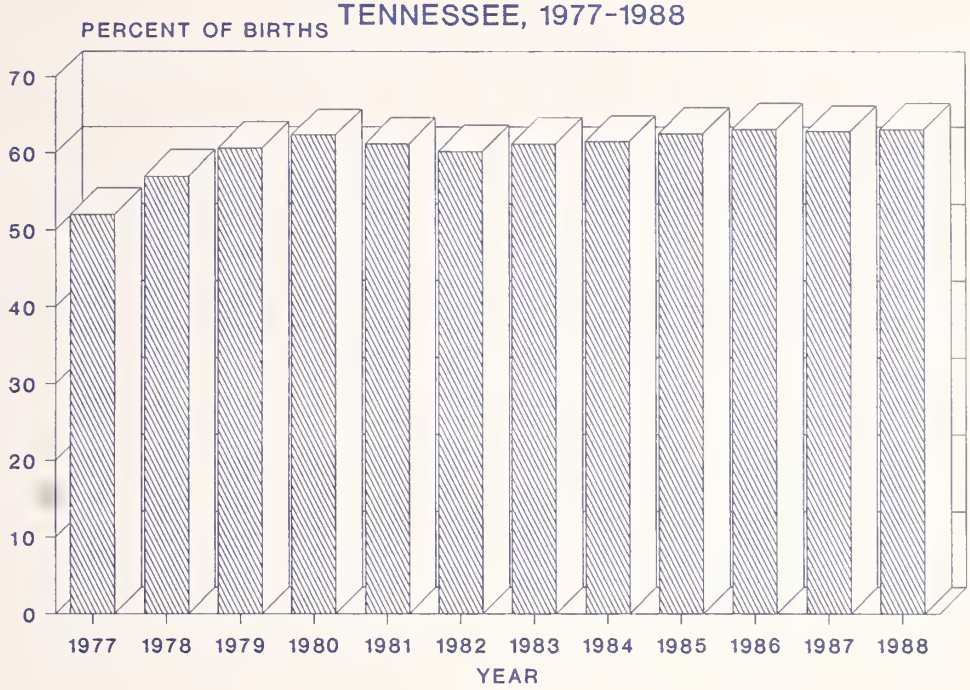
Based on 1980 through 1988 data, it appears unlikely that Tennessee will achieve the national numerical target of the Year 2000 Objective. However, through efforts currently underway, we are striving for improvements at the same rate as the nation. Changes in the Medicaid eligibility requirements implemented since 1987 are having an impact on access to medical care for pregnant women. At the current 150% of federal poverty level Medicaid coverage for pregnant women, half the births in the state could be Medicaid-funded. The number of Medicaid-eligible pregnant women has more than doubled since these changes were implemented (from 18,000 to 38,000). Through a new service called "presumptive eligibility" more pregnant women are gaining earlier access to Medicaid-covered prenatal care as well. As soon as her pregnancy is confirmed, a woman with family income below 150 percent of the federal poverty level can be presumed eligible for Medicaid and issued a temporary card by the local health department. The card is valid for all pregnancy-related outpatient services for 45 days while her regular Medicaid application is being processed.

**No care and inadequate care (Kessner Index).** In 1988, there were 2,185 black births with inadequate prenatal care and 564 black births with no prenatal care. Together, these two prenatal care categories constituted 16.2 percent of all black births. Half of Tennessee black births are to Shelby County residents, yet over 60 percent of black births with inadequate or no care were among this group.

Care coordination is a service provided in local health departments designed to assist women in gaining access to prenatal care and other needed services. In July 1989, the department began providing care coordination through Project HUG (HELP US GROW). HUG is a set of interrelated activities under which responsibility for locating, coordinating and monitoring appropriate services for an individual rests with a specific person within the care coordination agency. The purposes of care coordination are:

- to assist those individuals in gaining access to needed medical, social, educational and other services;
- to encourage the use of cost-effective medical care by referral to appropriate providers;
- to discourage overutilization or duplication of costly services;
- to optimize the growth and development of infants and young children; and
- to reduce infant mortality and morbidity, including low birthweight.

PERCENT OF MINORITY BIRTHS WITH PRENATAL CARE BEGINNING IN THE FIRST TRIMESTER, RESIDENT DATA, TENNESSEE, 1977-1988



## RISK FACTORS DURING PREGNANCY

Prior to 1990, no data have been collected on certain risk factors among pregnant women during their child's fetal development, such as alcohol and other drug abuse and maternal weight gain. A change in the Tennessee birth certificate implemented on January 1, 1990, gives the first look at these risk factors, among others. At the time this publication was formulated, provisional data for January through April 1990 were available.

## ALCOHOL CONSUMPTION DURING PREGNANCY

Alcohol consumption during pregnancy is not recommended even in moderation. Provisional data for January through April 1990 indicate that 2.1 percent of black births and 1.4 percent of white births had reported fetal alcohol exposure.

Of the births with such exposure, 39.8 percent of black births were exposed to one drink per week and 16.5 percent, two drinks, for a total of 56.3 percent. For whites the percentages were 63.4 percent and 12.1 percent, or three-fourths of white births.

Almost 45 percent of drinking black mothers consumed over two drinks per week; 9.7 percent reported 20 drinks per week. The comparable percentages for whites were 24.6 and 8.6.

## SMOKING DURING PREGNANCY

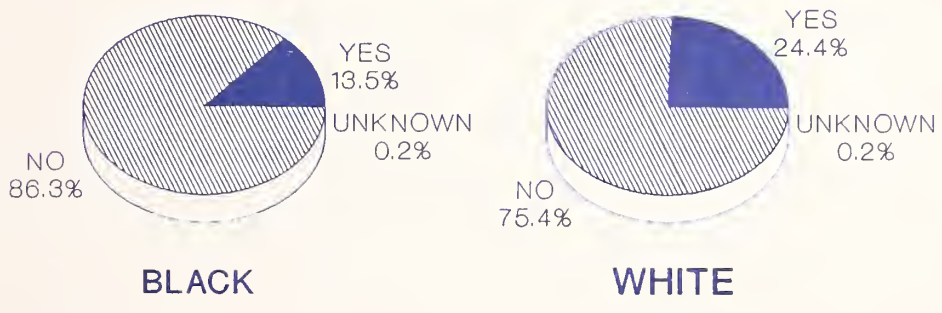
Smoking during pregnancy has been correlated with spontaneous abortion, preterm delivery, low birthweight, and fetal and infant death. Findings of the Alameda County Low Birth Weight Study Group indicate that:

> ...elimination of cigarette smoking during pregnancy would prevent 18% of singleton low-birth-weight births in whites and 35% of singleton low-birth-weight births in blacks.

Provisional data for January through April of 1990 indicate that whites had almost twice the proportion of smoking during pregnancy of blacks. Almost one-fourth (24.4 percent) of white births were reported with maternal cigarette consumption during pregnancy; for black births the percentage was 13.5 percent.

Of the women who smoked, 49.6 percent of whites and 70.7 percent of blacks smoked a half pack or less per day. In other words, more white smokers than black reported consumption of greater than one half pack per day.

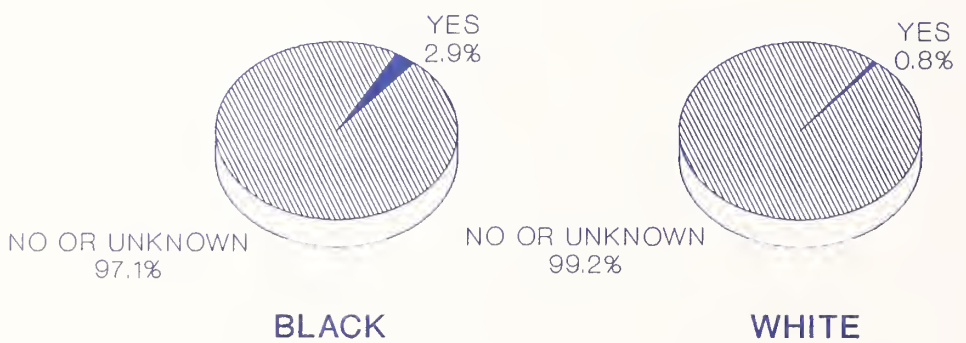
### PROVISIONAL PROPORTIONS OF REPORTED SMOKING DURING PREGNANCY, BY RACE, RESIDENT DATA, JANUARY-APRIL 1990



## DRUG USE DURING PREGNANCY

Drug use during pregnancy is an increasing problem in the United States but it is seriously under-reported. Provisional birth data for January through April 1990 show that of black births, 2.9 percent were exposed to drug usage during fetal development compared to 0.8 percent of white births.

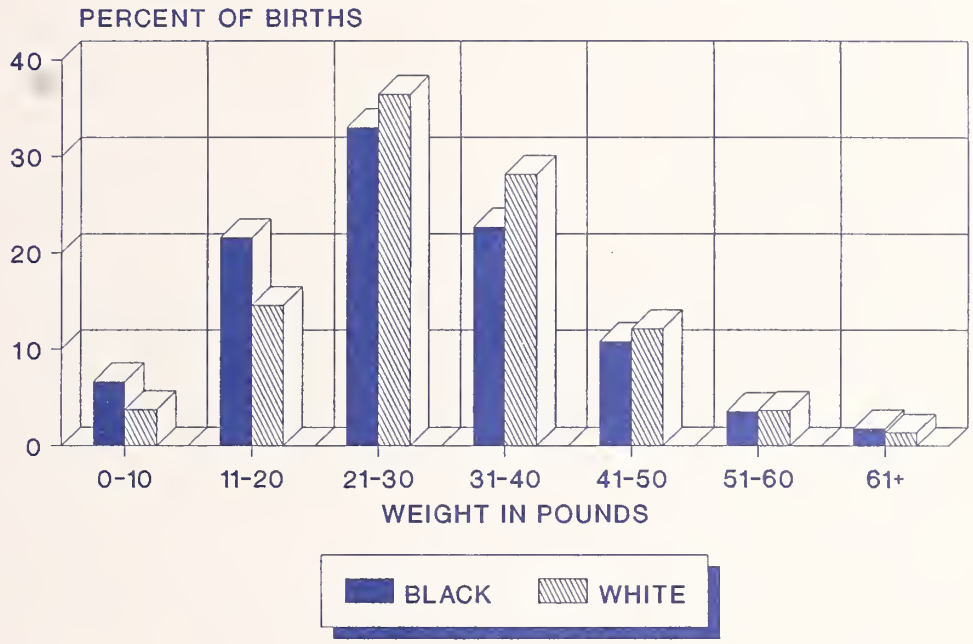
### PROVISIONAL PROPORTIONS OF REPORTED DRUG USE DURING PREGNANCY, BY RACE, RESIDENT DATA, JANUARY-APRIL 1990



## WEIGHT GAIN DURING PREGNANCY

Inadequate weight gain during pregnancy has been correlated with low birthweight at delivery. Current recommendations state that 30 pounds is the recommended weight gain for maternal and fetal health. Provisional data for January through April of 1990 indicate that black mothers have proportionally higher incidences of inadequate weight gain when compared to white mothers; 28.2 percent of black births were the result of a weight gain of 20 pounds or less. The comparable percentage for white mothers was only 18.3 percent.

PROVISIONAL PROPORTIONS OF POUNDS GAINED DURING PREGNANCY, BY RACE, TENNESSEE, JANUARY-APRIL 1990

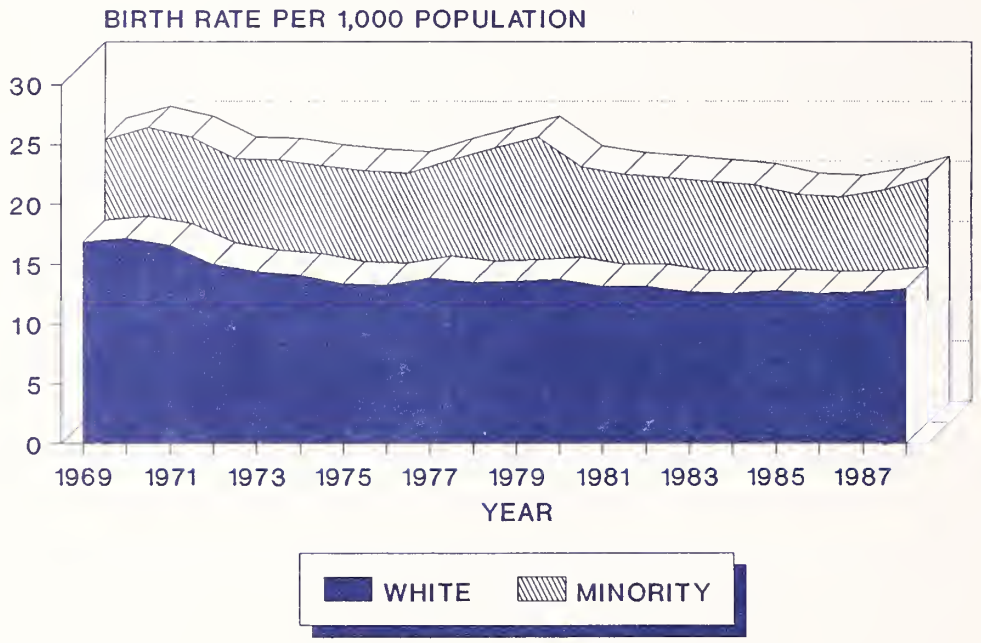


## BIRTH RATES

Minority birth rates are approximately one and a half times those for whites. Twenty percent of the minority population is currently under the age of ten years.

The general fertility rate is the number of births per 1,000 childbearing-aged women 15-44 years. For minorities this rate is 1.4 times that of whites.

BIRTH RATES PER 1,000 POPULATION, BY RACE, RESIDENT DATA, TENNESSEE, 1969-1988

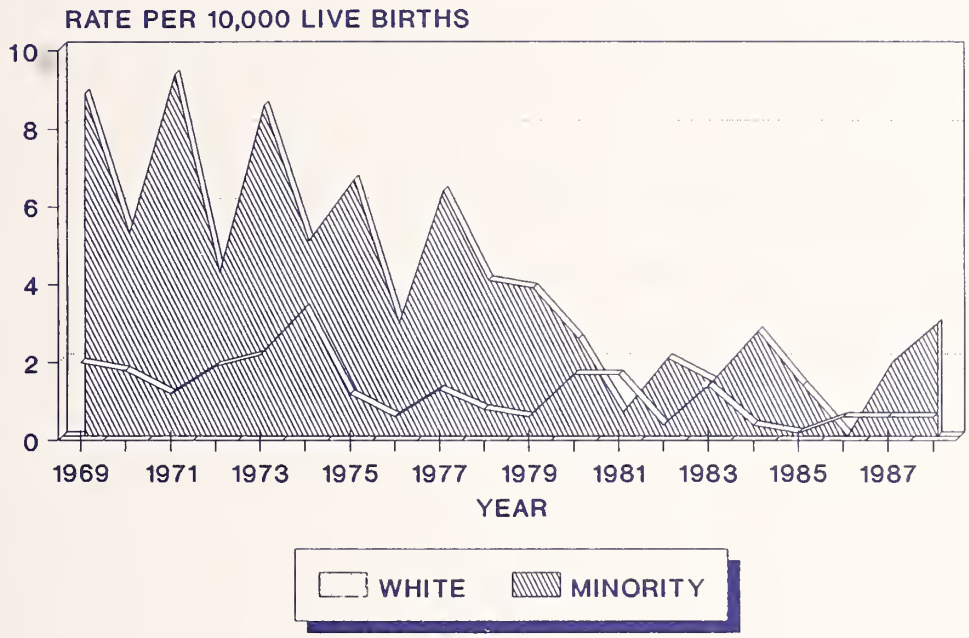


# MATERNAL DEATHS

The death of a woman as the result of a pregnancy is a rare occurrence today. Since 1976, there have been less than 10 total maternal deaths per year, and less than five annually among minorities since 1980.

Due to the small number of events annually, the maternal death rate is very volatile, but the general trend has been downward for the past two decades. In 1986, there were no maternal deaths among minority women; there were five in 1988.

MATERNAL DEATH RATES PER 10,000 LIVE BIRTHS,
RESIDENT DATA, TENNESSEE, 1969-1988



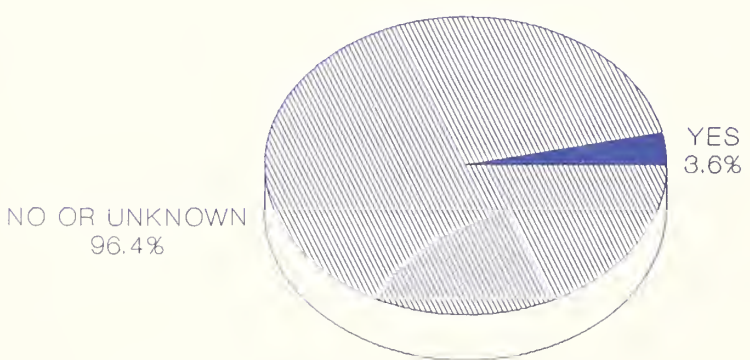
## BREAST-FEEDING

The national Year 2000 Objective is to increase to at least 75 percent the proportion of mothers who exclusively or partially breast-feed their babies in the early postpartum period. The Objective also attempts to increase to at least 50 percent the proportion who continue breast-feeding until their babies are five to six months old. Special population target groups include low-income mothers and black mothers.

Throughout the 1980s, the statewide rates of breast-feeding among women participating in the WIC Program in Tennessee remained stable at around 9 to 10 percent. The rates have been substantially lower among the black population, with only 3.6 percent of black WIC participants breast-feeding at six weeks after birth in 1985 (most recent statewide data by ethnicity).

To address this problem, Tennessee Department of Health and Environment initiated a breast-feeding promotion and support program in 1987. This program, based in Fayette County and targeted toward low income black women, has more than doubled the rate of breast-feeding at hospital discharge and increased the duration of breast-feeding at six weeks more than fourfold in that county. The incidence of breast-feeding among these women is now over 40 percent.

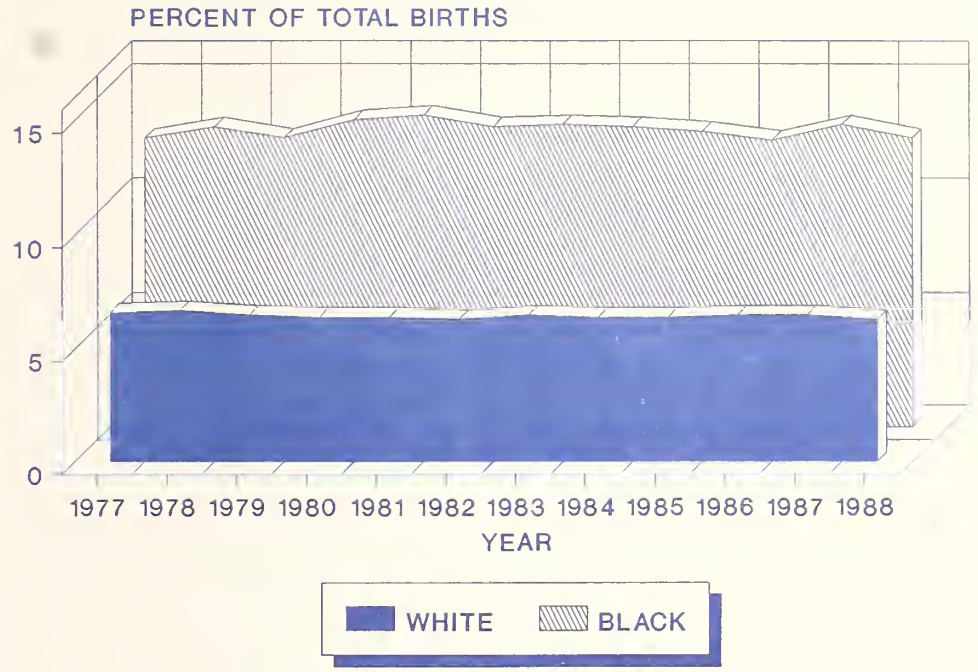
PERCENT DISTRIBUTION OF BLACK WIC PARTICIPANTS WHO BREAST-FED, 1985



## LOW BIRTHWEIGHT

Low birthweight is an indicator of inadequate fetal growth resulting from premature birth (duration of pregnancy less than 37 weeks), poor weight gain for a given duration of pregnancy (intrauterine growth retardation, often correlated with poor maternal nutrition), or both. Over the last ten years the rate of low-weight births has remained substantially the same. From 1984 through 1988, an average of over twice the proportion of black births (12.9 percent) than of white births (6.4 percent) were low weight (less than 5 pounds, 8 ounces). Low-birthweight infants constituted 69.3 percent of all black infant deaths compared to only 57.5 percent for whites.

PERCENT DISTRIBUTION OF LOW-WEIGHT BIRTHS, BY RACE, RESIDENT DATA, TENNESSEE, 1977-1988



According to the 1985 *Report of the Secretary's Task Force on Black and Minority Health*:

> The many risk factors associated with poor perinatal outcome [infant or fetal death, congenital malformations, low birthweight, etc.] among minorities appear also related to low socioeconomic status: (1) low income and inadequate insurance coverage that often reduces access to appropriate medical care, (2) preexisting health conditions, (3) poor nutrition, (4) inadequate housing and crowded living conditions, (5) limited maternal education, (6) stressful working environments, (7) disrupted families and lack of social supports, and (8) problems of transportation and child care which impede use of services. All are more prevalent among poor and minority women.

The development of high technology neonatal intensive care units and their increased availability have made a major contribution to the reduction of neonatal mortality. However, the capacity of these technological developments to lower the neonatal mortality rate is hindered by the lack of progress in the reduction of low weight births.

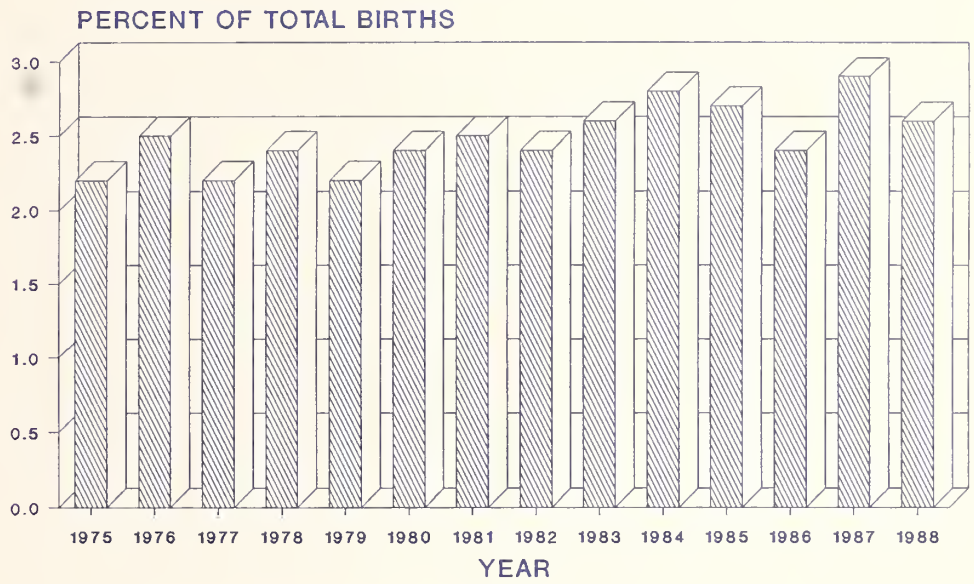
Unless progress is made in the reduction of the incidence of low weight births, infant mortality rates will not be substantially reduced.

According to the Institute of Medicine's Committee to Study the Prevention of Low Birthweight (1985):

> ...the overwhelming weight of the evidence is that prenatal care reduces low birthweight....[P]renatal care is most effective in reducing the chance of low birthweight among high-risk women, whether the risk derives from medical factors, sociodemographic factors, or both.

**Very low birthweight.** Babies who are very low birthweight (less than 1,500 grams) are at tremendous risk of not surviving the neonatal period. An increase in very-low-weight births potentially would also increase neonatal mortality rates. In 1988, 2.6 percent of black births were in this risk group.

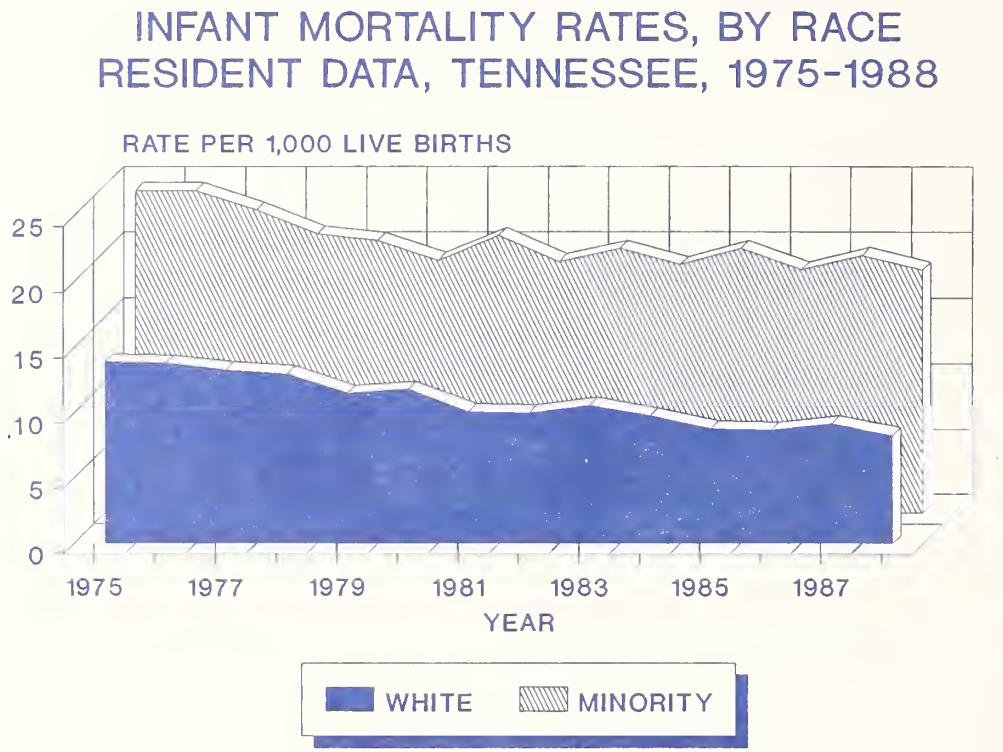
## VERY LOW BIRTHWEIGHT RATES AMONG BLACK BIRTHS, RESIDENT DATA, TENNESSEE, 1975-1988



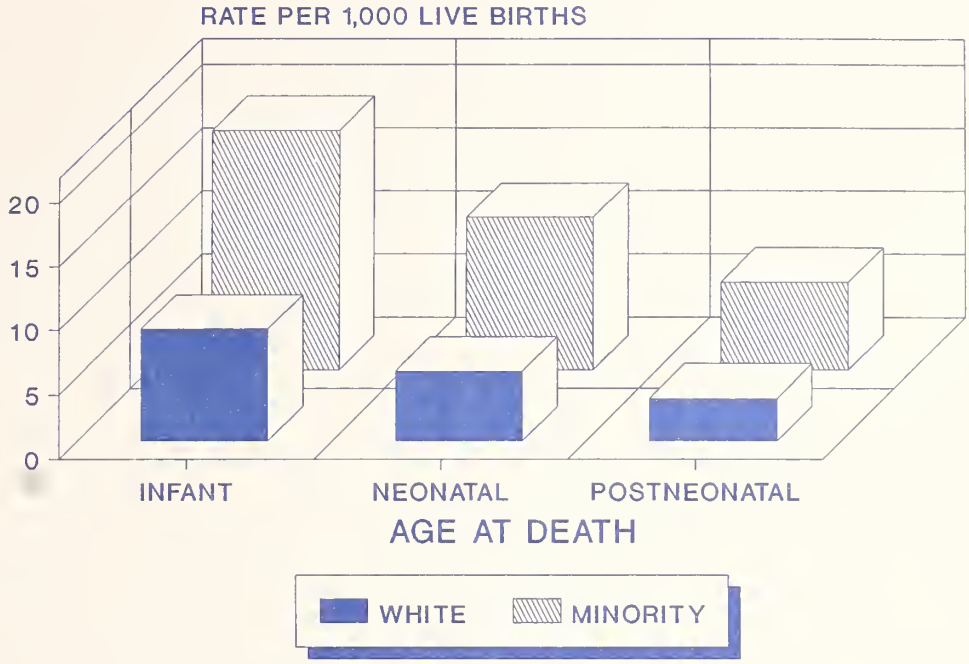
## INFANT MORTALITY

Black infants today are over two times more likely to die during the first year of life than white infants, a differential larger than in 1950.

In 1988, 324 black infants died before their first year of age. This means that of every thousand black births in that year, almost 19 did not reach their first birthday. While only 24.9 percent of resident births in 1988 were black, 42.5 percent of the total infant deaths were black.

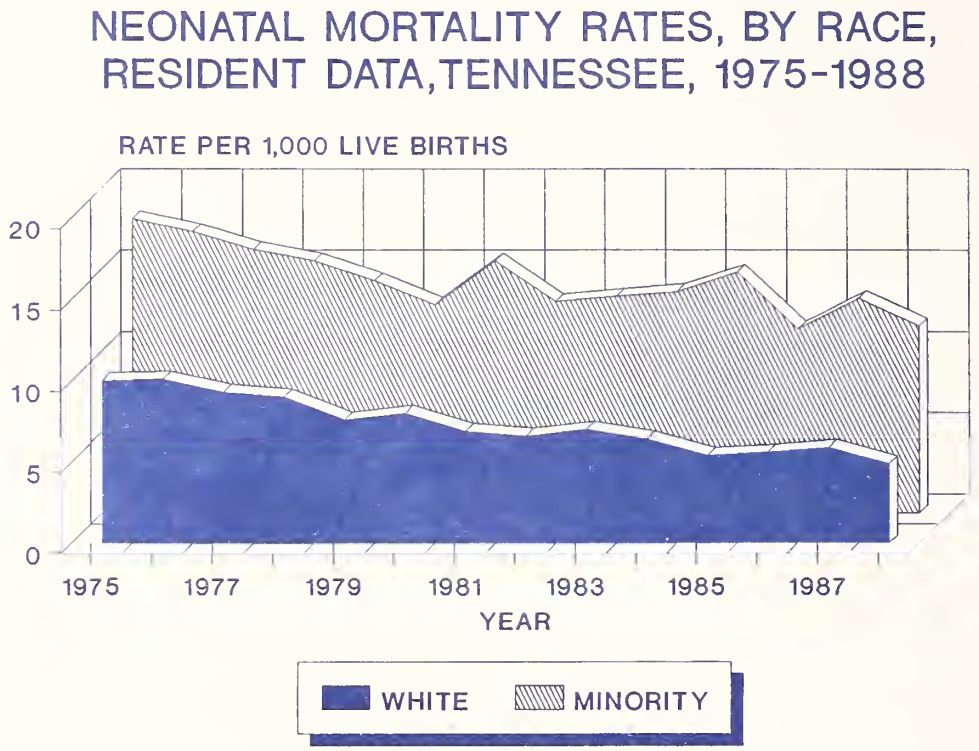


THREE-YEAR AVERAGE RATES OF INFANT MORTALITY BY AGE AT DEATH, RESIDENT DATA, TENNESSEE, 1986-1988



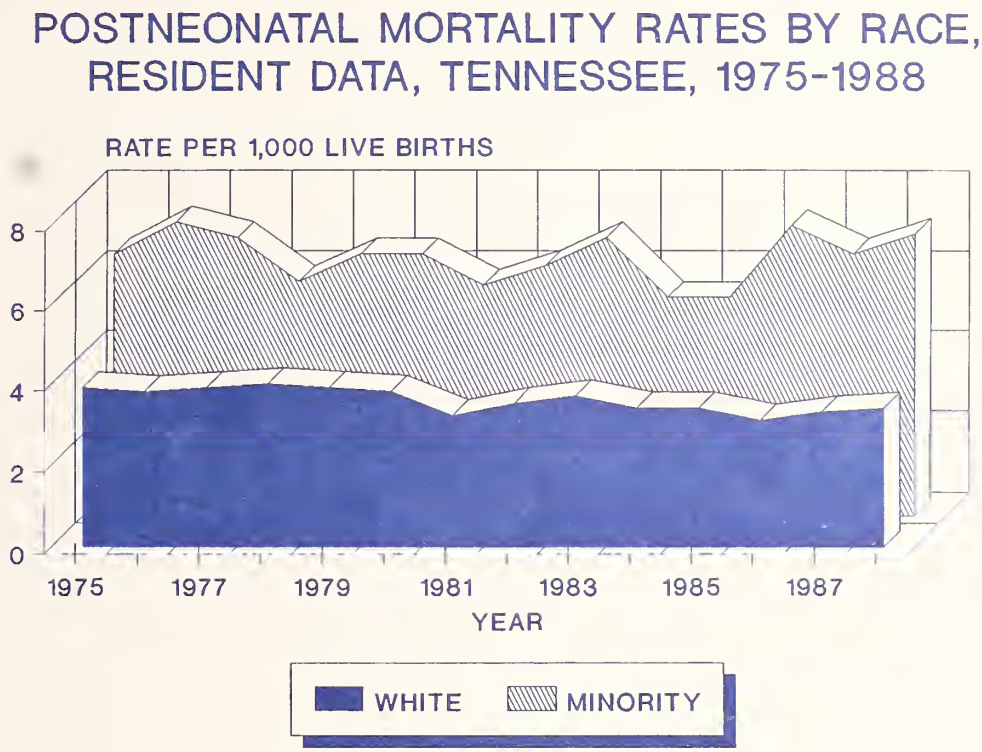
## NEONATAL DEATHS

Neonatal deaths are deaths of infants aged less than 28 days. Deaths in this age group are primarily due to conditions surrounding the pregnancy and birth. From 1975 through 1988, neonatal death rates in blacks declined from 18.1 deaths per 1,000 live births in 1975 to 11.5 in 1988, a decrease of 36.5 percent. Yet, the comparable decline for whites was 51.0 percent, from 10.0 to 4.9. During that time period, the relative risk of neonatal mortality was approximately twice as high for blacks as for whites.



## POSTNEONATAL DEATHS

Postneonatal deaths are deaths of infants aged 28 days to one year. Deaths in this age group are primarily due to sudden infant death syndrome, infections, and external causes such as fires and other accidents. From 1985 to 1986, the black postneonatal mortality rate jumped from 5.4 to 7.2, the highest rate since 1976. The 1988 rate was 7.0.



## STATE-FUNDED INFANT MORTALITY REDUCTION PROJECTS

The problem of low birthweight is the single most important cause of infant death or subsequent handicaps in infancy and childhood. Although low birthweight babies (below 5.5 pounds) represent a small percentage of all babies born, well over half of all infant deaths occur among this group. The problem is even more serious for tiny infants (very low birthweight).

Nationally, those babies whose birthweights are very low (below 3.3 pounds) are 200 times more likely than larger babies to die in the first few weeks of life, and three times more likely to suffer from congenital anomalies or developmental delays if they survive.

To address these problems, the Tennessee Department of Health and Environment worked with members of Tennessee's Black Legislative Caucus and the 94th General Assembly to obtain funding for black health activities. From 1987 through 1990, the Black Health Care Task Force, established by the Tennessee Department of Health and Environment has funded three infant mortality reduction demonstration projects. These projects were located in the following high-risk areas:

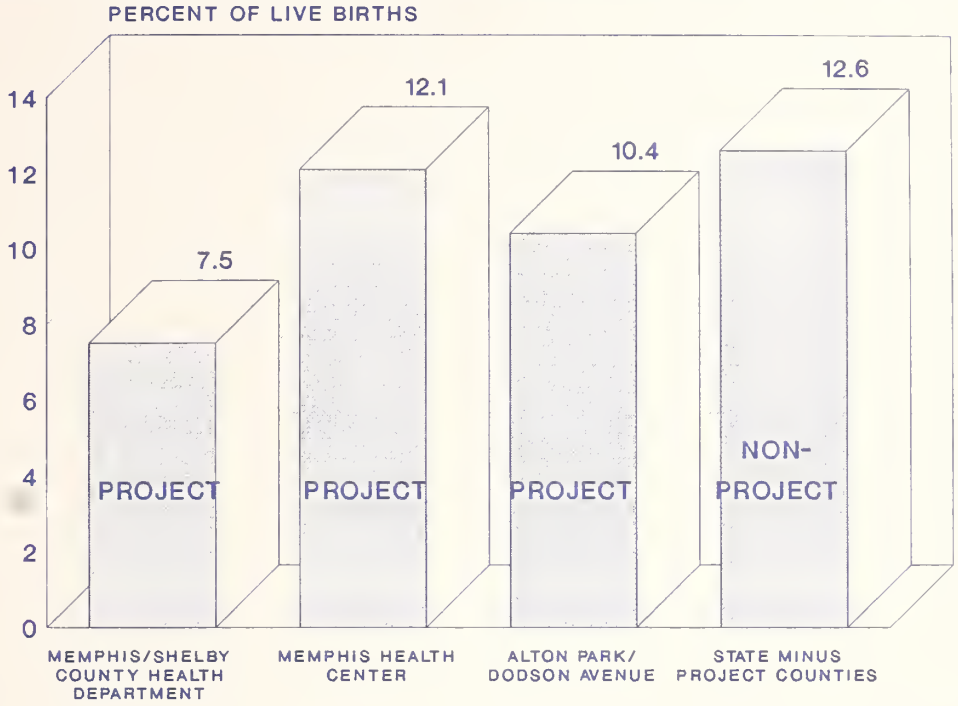
- Alton Park/Dodson Avenue in Hamilton County
- Memphis Health Center in Shelby County
- Memphis/Shelby County Health Department

The 18-months evaluation of these projects showed that the projects' targeted black mothers had lesser proportions of low-weight births than both the remaining births among their respective county's residents and the remainder of the state.

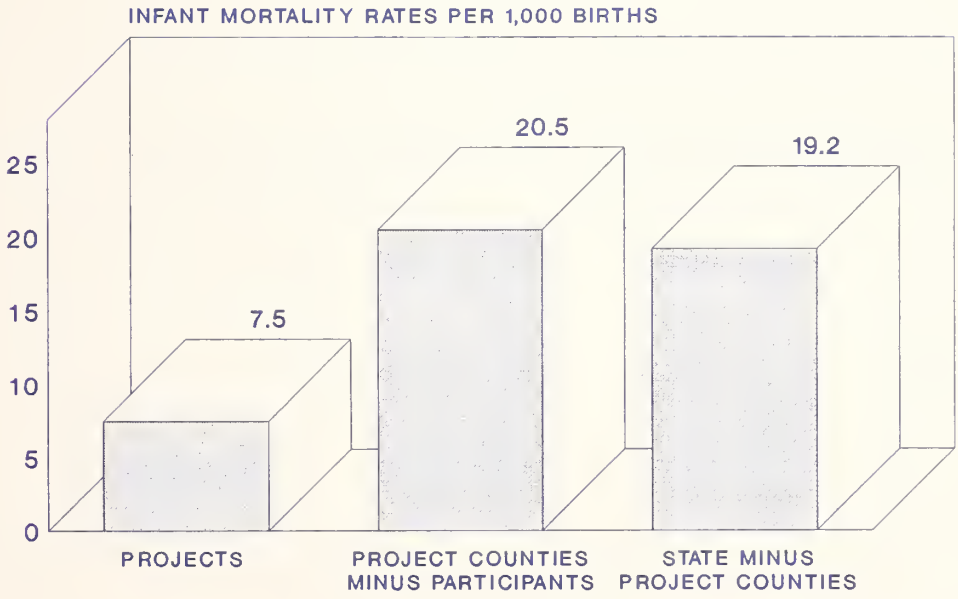
In addition, the same result was achieved in lessening the infant mortality rates for 1988 among project participants when compared to non-participants.

Many of the components of these special demonstration projects have been incorporated into the department's care coordination service through Project HUG. They continue to be available to women in the communities served by the special demonstration projects.

## LOW BIRTHWEIGHT RATES AMONG PROJECT PARTICIPANTS VS. NONPARTICIPANTS, JULY 1, 1987-DECEMBER 31, 1988




## INFANT MORTALITY RATES AMONG PROGRAM PARTICIPANTS VS. NON-PARTICIPANTS, 12-MONTHS EVALUATION, 1988



# SPECIAL SUPPLEMENTAL FOOD PROGRAM FOR WOMEN, INFANTS, AND CHILDREN

A comprehensive, national evaluation of the Special Supplemental Food Program for Women, Infants, and Children, called WIC, concluded that the program is effective in improving the health of pregnant women and children. The National WIC Evaluation, published by David Rush in 1986, found some of the program's benefits include: improved diets of mothers and children, better health care for pregnant women, improved nutrition and weight gain for mothers, lower rates of late fetal deaths, slightly larger head circumferences at birth, greater family expenditures for food, improved nutrition for infants and children, and better health care for children.

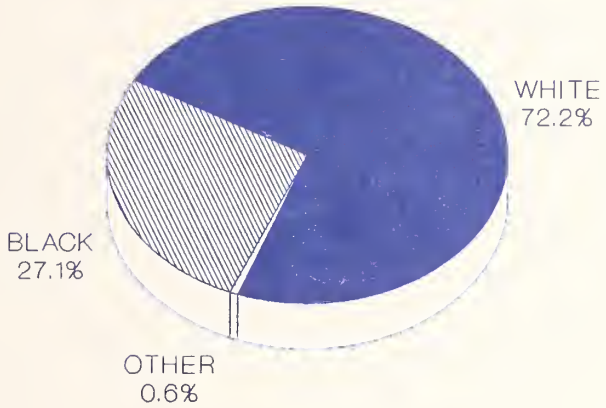
The Tennessee WIC Program emphasizes service to prenatals and infants. The number of WIC participants in Tennessee has increased steadily over the past five years, from 63,751 in September 1985 to its current level of 103,000 per month. In 1988, the WIC program served more than half of the eligible population, which ranked the state 18th in terms of the percentage served. The expansion of the WIC caseload has been possible because of innovative financing. Through a contract with Mead Johnson, the state receives a rebate of $1.625 for each can of standard infant formula purchased with WIC vouchers. These rebate funds have financed the caseload expansion.

Recently, many states have had to cut back the number of women, infants, and children served on the federally-funded WIC Program because of unexpected increases in food prices. Tennessee's WIC Program has not been cut back because the total food dollars available to Tennessee were increased in the current federal fiscal year. Part of the increase is through the FY 1990 U.S. Department of Agriculture grant and the remainder is through the infant formula rebate dollars paid to Tennessee.

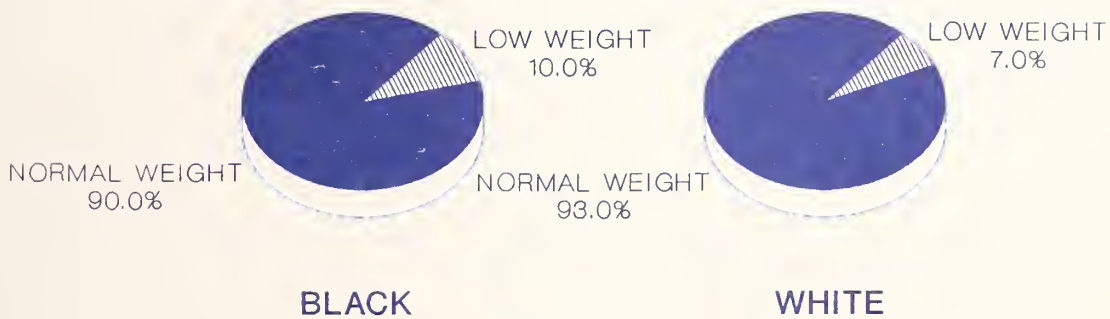
Participation in the Women, Infants and Children (WIC) Supplemental Food Program has assisted pregnant women and their young children in receiving adequate nutrition. Almost 30 percent of WIC participants in 1989 were minorities.

A lesser proportion of low birthweight infants was noted among black WIC participants than among the state average for births in 1989. Only 10.0 percent of black WIC infants were low weight, compared to an average of more than 12 percent for total state black births.

## PERCENT DISTRIBUTION OF WIC INFANTS BY RACE, TENNESSEE, 1989




## PERCENT DISTRIBUTION OF WIC INFANTS BY BIRTHWEIGHT AND RACE, 1989




Source: Nutrition Services, Tennessee Department of Health and Environment

# INDUCED ABORTIONS

The characteristics of the average Tennessee woman undergoing an induced abortion have remained relatively stable since the legalization of the procedure in the state. The woman is characteristically young, white, unmarried, and has never had a previous abortion.

There were 19,305 induced abortions obtained by residents of Tennessee in 1988, for an increase of 2.6 percent over the number (18,816) in 1987. Minority women accounted for 33.9 percent of the total induced abortions in 1988, compared to 65.7 percent for white women. The proportion of abortions obtained by minorities has risen slowly since 1982, when it was a low of 24.6 percent.

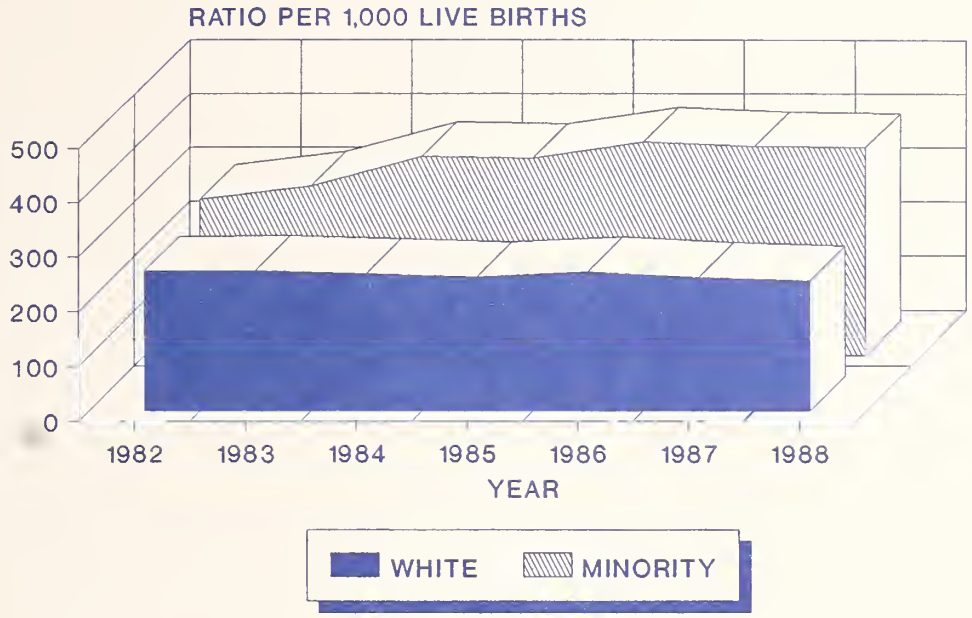
In 1988, of Tennessee women undergoing abortions, the ratio of induced abortions per 1,000 resident live births was higher for minorities than for white women: 381.8 and 237.1, respectively.

The 1988 distribution by age varied somewhat according to race of women. Of the white women, 29.4 percent were under 20 years of age, while 26.6 percent of women of other races were in this age group. For minority women, 39.5 percent were 25 years of age or older, while the corresponding percentage for white women was 38.6.

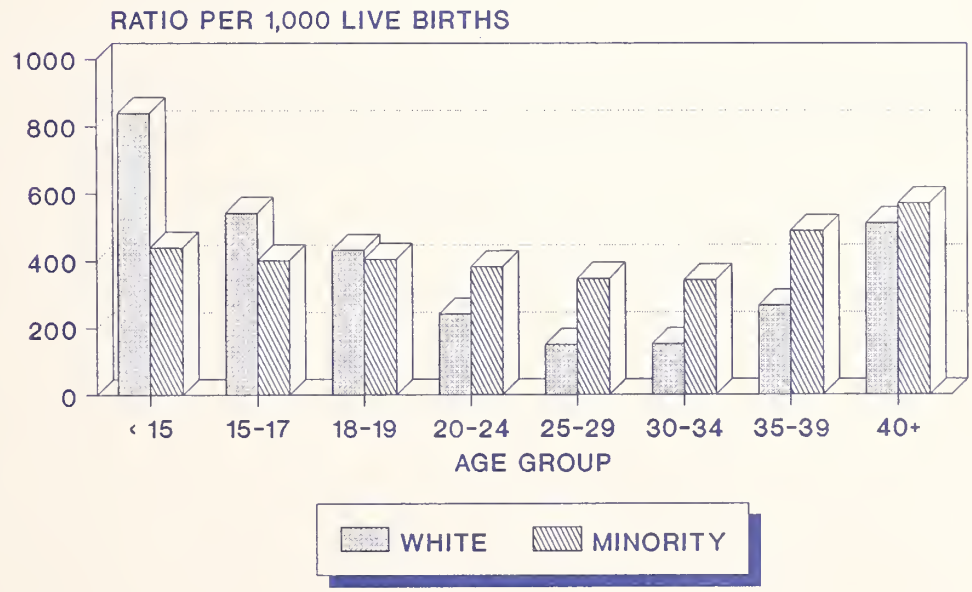
For women under 20 years of age, abortion ratios for white women were higher than for minorities. In other words, young pregnant white teens were almost twice as likely to choose abortion as their minority counterparts.

The total number of previous pregnancies for women obtaining abortions includes the total number of previous live births, spontaneous abortions (fetal deaths), and previous induced abortions. A larger proportion of minority women in 1988 had a previous pregnancy history than did white women: 70.3 percent vs. 55.0 percent.

## INDUCED ABORTION RATIOS BY RACE, RESIDENT DATA, TENNESSEE, 1982-1988




## INDUCED ABORTION RATIOS BY AGE OF WOMAN ACCORDING TO RACE, RESIDENT DATA, TENNESSEE, 1988



# HEALTH MANPOWER

## MINORITY REPRESENTATION IN SOUTHERN MEDICAL SCHOOLS

The *Year 2000 Objectives for the Nation* have aimed at increasing to at least 15 percent the proportion of all degrees in the health professions and allied/associated health profession fields awarded to members of under-represented racial/ethnic minority groups. The national average in 1985-1986 was approximately eight percent. Among blacks, the Objective aims at increasing representation from five percent in 1985-1986 to eight percent by the year 2000.

**Enrollment.** The Southern Regional Education Board (SREB) has recently addressed recruitment, retention, and underrepresentation of minorities in Southern allopathic medical schools. (The Southern Regional Education Board is a coalition of educators, government officials, and civic leaders who research higher education needs in the South.) According to the SREB study, there were disproportionately fewer minorities enrolled in the 1989-90 academic year in the region's 42 medical schools than would be expected based on the minority population distribution. Over one-fourth (25.3 percent) of the region's population was minority compared to 9.2 percent minority enrollment in medical schools.

If data for two traditionally black medical schools, Morehouse and Meharry, were excluded from the 42 schools surveyed by SREB, the minority enrollment representation would be 7.6 percent. Morehouse School of Medicine in Atlanta reported 77.9 percent minority enrollment and Meharry Medical College in Nashville, 76.2 percent. Among public and independent non-traditional black schools, the regional average was 5.2 percent each, less than the national average of 5.5 percent. The national average among traditionally black schools was 76.7 percent.

Other Tennessee schools included in the enrollment survey were East Tennessee State University, Johnson City (10.7 percent), University of Tennessee, Memphis (7.3 percent), and Vanderbilt University, Nashville (2.7 percent).

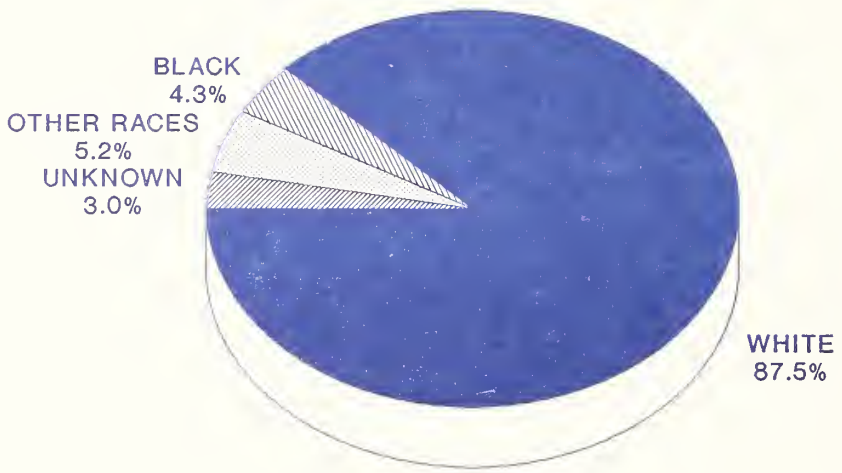
Among the 42 SREB-surveyed medical schools, Morehouse and Meharry ranked first and second in the proportions of minority enrollments. East Tennessee State University ranked ninth, the University of Tennessee 19th, and Vanderbilt, 38th.

**Graduation**. During the 1987-1988 academic year, Morehouse and Meharry medical school graduates comprised 24.1 percent of the region's minority graduates and 32.1 percent of all black graduates. In that year, there were 78 minority graduates from Tennessee medical schools; 69 were from Meharry. The University of Tennessee graduated four minority students, Vanderbilt, three, and East Tennessee State, two.

## MINORITY REPRESENTATION IN TENNESSEE HEALTH RESOURCES

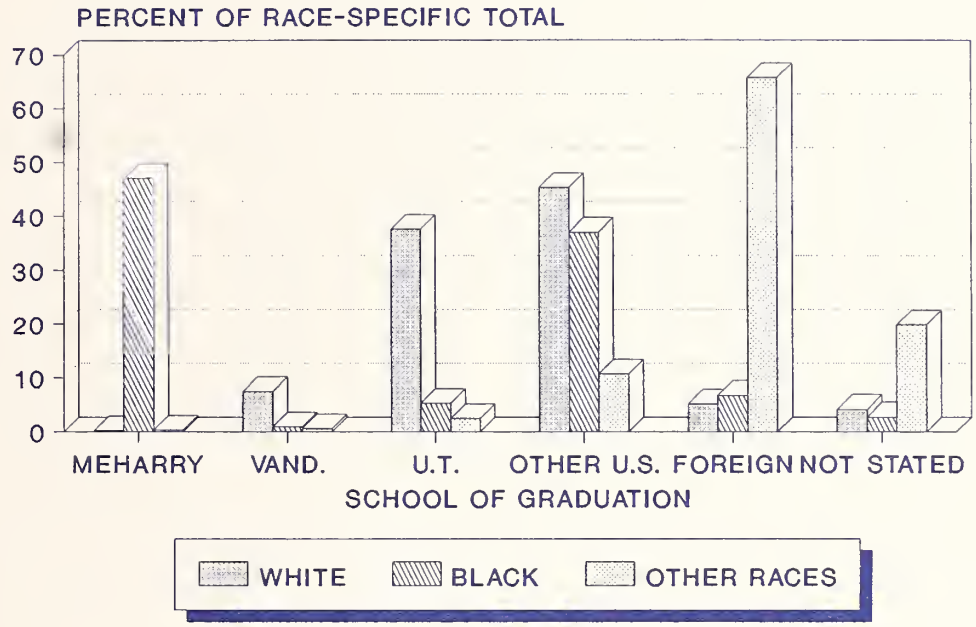
Tennessee physicians. In 1990, members of minority race groups accounted for less than ten percent (9.5) of actively practicing medical doctors in Tennessee. Of the 9,163 licensed, active M.D.s with a practice in Tennessee, 397 or 4.3 percent were blacks. An additional 477 or 5.2 percent were other races.

### PERCENT DISTRIBUTION OF MEDICAL DOCTORS ACTIVELY PRACTICING IN TENNESSEE, BY RACE, 1990



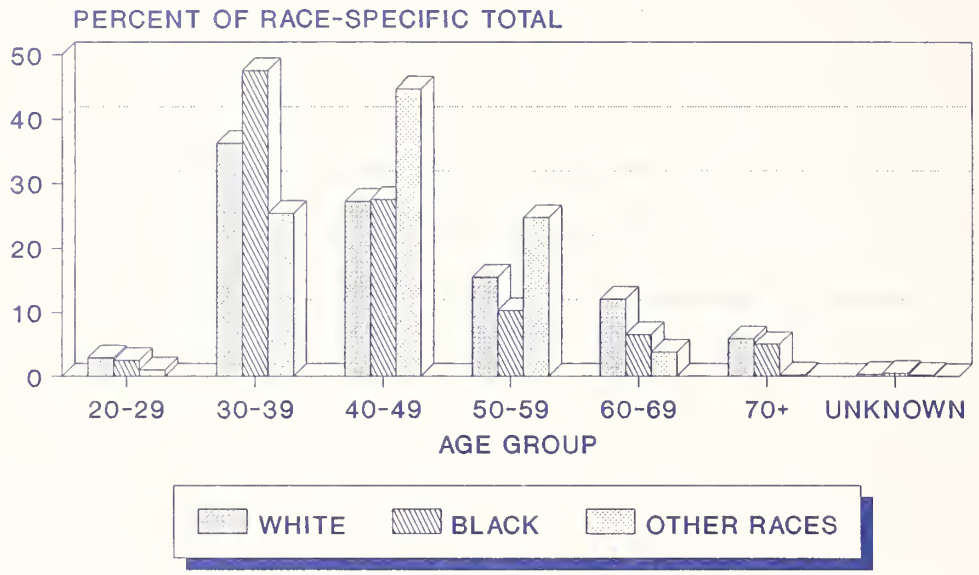
Almost half (47.1 percent) of actively practicing black doctors were graduates of Meharry Medical College. An additional 37.0 percent were graduates of medical schools located outside of Tennessee. M.D.s who were of races other than white or black tended to be graduates of foreign medical schools.

## SCHOOL OF GRADUATION OF MEDICAL DOCTORS, BY RACE, TENNESSEE, 1990



Half of all black doctors were less than 40 years of age, while the major proportion of Asian and other race doctors tended to be aged 40-49 years.

## PERCENT DESTRIBUTION OF MEDICAL DOCTORS ACTIVELY PRACTICING IN TENNESSEE, BY RACE AND AGE, 1990



**Tennessee nursing schools.** Minority enrollment in nursing varies in the colleges and universities administered by the Tennessee Higher Education Commission. The fall 1989 enrollment for these schools indicates a variation in proportions among four-year schools from none at Tennessee Technological University to 48.8 percent in Tennessee State University. In two-year schools, most schools had less than 13 percent minority enrollment in nursing majors, with the exception of Shelby State Community College (66.5 percent).

Of 3,444 total fall 1989 enrollment in four-year nursing majors, 659 or 19.1 percent were minorities. The average of four-year institutions without Tennessee State University's minority enrollment was 11.0 percent.

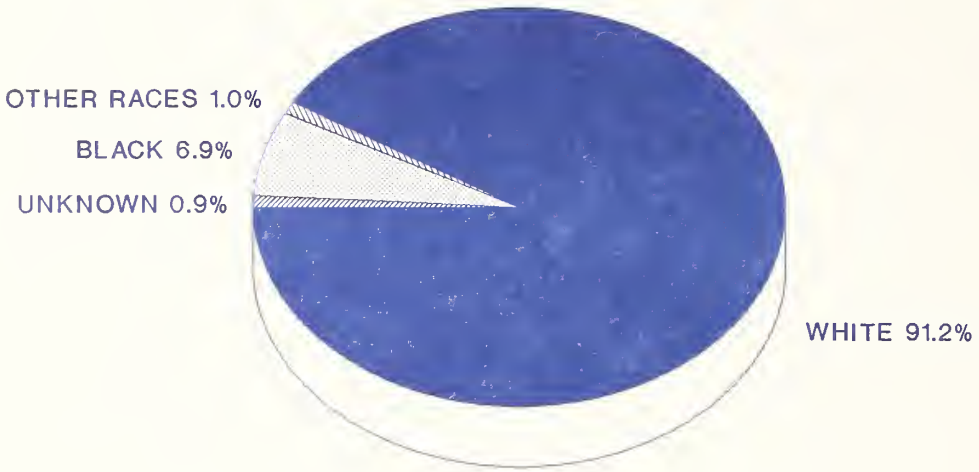
Likewise, when Shelby State's enrollment figures were subtracted from two-year college head counts for nursing majors, the minority enrollment average was 6.3 percent.

The 1988-1989 count of nursing graduates for Tennessee public institutions was 1,089. Only 118 or 10.8 percent were black nursing students. Fifty-nine of these students were graduated from two colleges, Tennessee State University (both Associate's and Bachelor's degree programs) and Shelby State Community College.

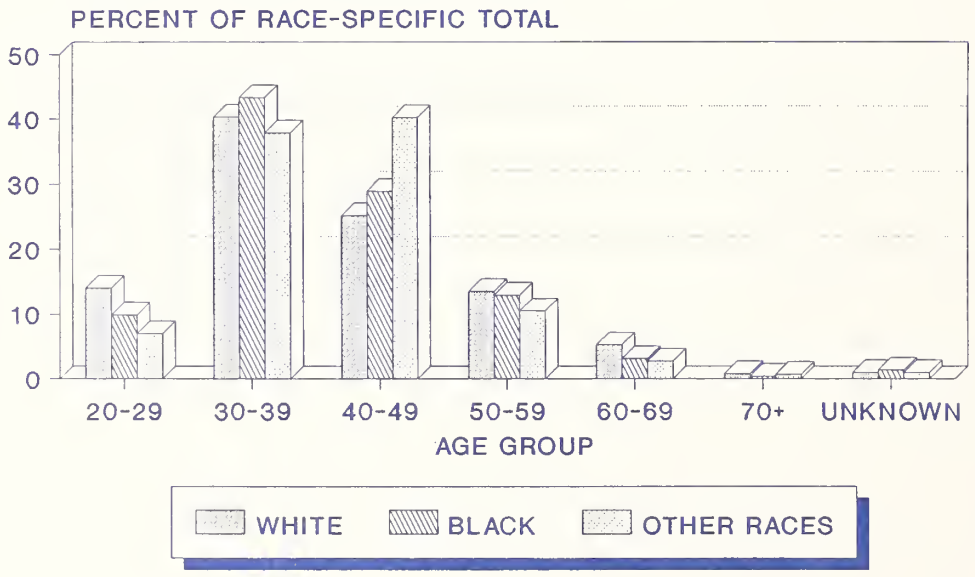
Blacks were evenly distributed among 1988-1989 graduating nurses by type of degree: 10.6 percent of Associate's degree recipients were black, 11.1 percent, Bachelor's degree, and 11.3 percent, Master's degree.

**Tennessee registered nurses.** In 1990, there were 29,820 actively practicing licensed registered nurses in Tennessee; 27,191 or 91.1 percent were white, 2,065 or 6.9 percent were black, and 286 or 1.0 percent were other races. The greatest proportion of whites and blacks were aged 30-39 years. Two out of every five R.N.s who were of other races were aged 40-49 years, compared to one out of four for blacks and whites.

## PERCENT DISTRIBUTION OF REGISTERED NURSES ACTIVELY PRACTICING IN TENNESSEE, BY RACE, 1990




## PERCENT DESTRIBUTION OF REGISTERED NURSES ACTIVELY PRACTICING IN TENNESSEE, BY RACE AND AGE, 1990



# DISEASES

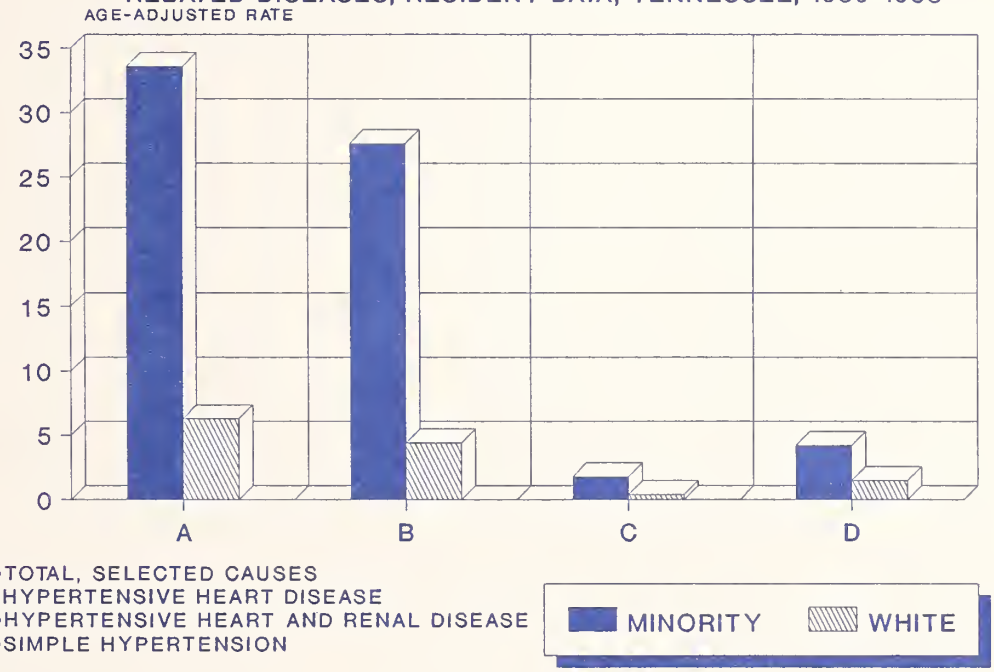
## BLACKS AND HIGH BLOOD PRESSURE

Heart disease, stroke, and kidney disease have been linked to elevated blood pressure. According to the U.S. Public Health Service, one in four blacks in the United States has high blood pressure, compared to one in six persons in the general population. The control of hypertension in blacks has the potential of greatly impacting on the differentials in mortality in that population. When linked with obesity, cigarette smoking, elevated blood cholesterol levels, or diabetes, high blood pressure multiplies the risk factors for premature mortality.

Since the presence of uncontrolled hypertension contributes to many different causes of death, it is difficult to estimate the prevalence of this problem among blacks in Tennessee. However, based on the number of individuals who died of selected, hypertension-related diseases, it is possible to determine that minorities in Tennessee have a very high relative risk of mortality when compared to white residents of the state.

According to three-year (1986-1988) average, resident age-adjusted death rates per 100,000 population for hypertension-related diseases, minorities are presently 5.3 times as likely as whites to die from hypertension-related diseases. An average of 300 minority residents die per year from these causes.

THREE-YEAR AVERAGE AGE-ADJUSTED DEATH RATES PER 100,000 POPULATION FOR SELECTED HYPERTENSION-RELATED DISEASES, RESIDENT DATA, TENNESSEE, 1986-1988



**Hypertensive heart disease (ICD-9 402).** Hypertensive heart disease constituted the bulk of deaths among the selected causes. Eighty percent of minority hypertension-related deaths were from this cause, compared to 70 percent for whites.

An average of 237 minority deaths per year were from hypertensive heart disease. When compared to whites, minorities were at 6.3 times the risk of death from this cause.

In addition, a shortened life span is evident. The average age at death from hypertensive heart disease among minorities was 66 years, ten years less than their white counterparts.

**Hypertensive heart and renal disease (ICD-9 404).** Hypertensive heart disease with renal disease is a cause of death which claimed an average of 18 minorities per year. Persons suffering with this disease frequently require dialysis.

Minorities are at 4.5 times the risk of death from this cause than whites. Yet, the average age at death for both minorities and whites was very similar (77 years and 76 years, respectively).

**Simple hypertension and hypertensive renal disease (ICD-9 401 and 403).** Simple hypertension, with or without renal disease, claimed an average of 39 minority persons annually. The relative risk (2.8) of minority death when compared to whites was not as great as for other hypertension-related causes. However, the average age of minority decedents (73 years) was four years less than the average for whites.

**Hypertension-related mortality.** Minority males and females aged 45 years and older had elevated risks, contributing to both premature and excessive mortality. In addition, minority males and females have exceptionally high risks of mortality from hypertensive heart disease, and the relative risks are highest in the young age groups.

Hypertensive-related diseases are but a proxy of overall deaths from high blood pressure. Control of hypertension among blacks would substantially reduce mortality in several related causes of death, such as stroke, in which premature and excessive mortality is evident among minorities.

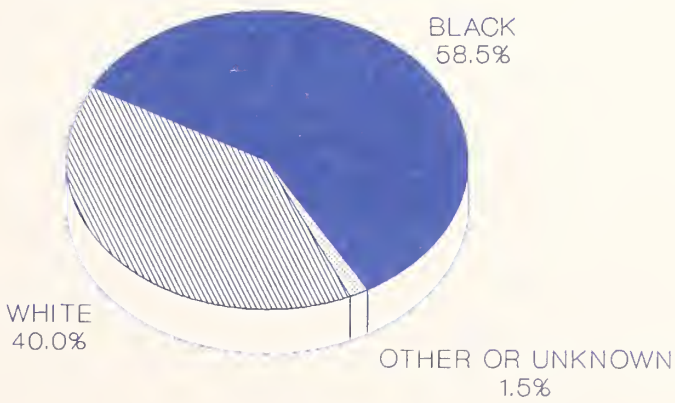
## END-STAGE RENAL DISEASE

Uncontrolled hypertension and diabetes represent the two leading causes of End-Stage Renal Disease in Tennessee. Over half (58.5 percent) the current participants in the Tennessee Department of Health and Environment's Renal Disease Program are black. The Department's Renal Disease Program assists individuals with End-Stage Renal Disease with the high costs of dialysis, pharmaceuticals, health care and transplantation. Both medical and financial criteria are used to determine eligibility for the program. Of all black participants, 48.4 percent were reported with the primary diagnosis of hypertension, compared to 18.4 percent for whites. Blacks are more than 2.5 times as likely as whites to be placed on the state's renal program because of hypertension.

Diabetes as a risk factor to the development of End-Stage Renal Disease in Tennessee appears to affect whites and blacks equally. Of all blacks enrolled in the program, 24.7 percent were reported as having diabetes as the primary diagnosis, compared to a similar figure of 24.5 percent for whites. However, being black and a female does place one at greater risk for the development of End-Stage Renal Disease in Tennessee. Black females are almost 60 percent more likely to be placed on the program due to diabetes than black males.

Using existing data, projections indicate that as many as 300 black program participants would not need this program if blacks exhibited the same rate as whites of hypertension as a primary diagnoses. This means that less than 700 blacks would be currently enrolled rather than the current enrollment of 987 black End-Stage Renal Disease victims. This disparity in primary diagnosis implies that improved efforts should be made to control the disease in the state's population.

### END-STAGE RENAL DISEASE PROGRAM PATIENTS BY RACE, TENNESSEE, 1990



## SEXUALLY TRANSMITTED DISEASES

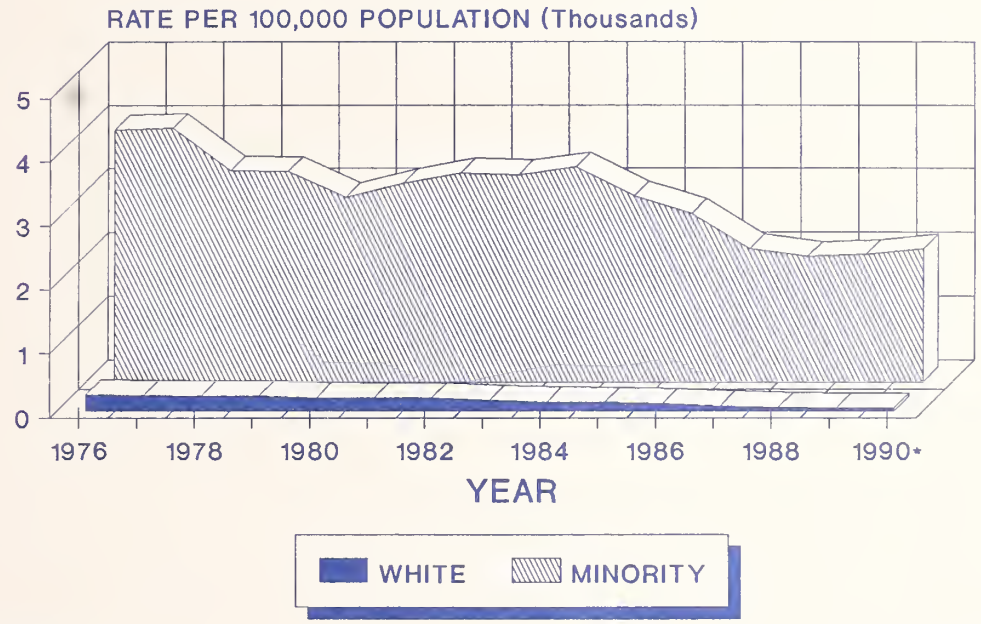
Traditionally, sexually transmitted diseases (STDs) in Tennessee exhibit changes in disease trends in the western part of the state. These trend changes are slowly experienced in Middle Tennessee, and finally are seen in East Tennessee over the course of five or six years. Reported gonorrhea cases were declining in Tennessee until mid-1988 when slight increases were noted in West Tennessee; 1988 still resulted in fewer gonorrhea cases reported statewide that year than in 1987. In 1989 and for the first six months of 1990 the overall state morbidity for STDs has increased.

Early syphilis has displayed the same "west-to-east" trend. Tennessee has experienced a similar dramatic increase as in gonorrhea, as has the rest of the nation. Nationwide, the lesion syphilis rate per 100,000 population is 18.1 -- the highest since 1949. Among major U.S. cities, only Atlanta and Washington, D.C., have higher rates of lesion syphilis than Memphis. One of out every 68 people in Memphis will contract a sexually transmitted disease in 1990.

In 1989, there were 19,557 cases of gonorrhea and 1,406 of lesion syphilis reported in Tennessee. Almost 90 percent (89.2) of the gonorrhea cases and 94.7 percent of the syphilis cases were among blacks.

**Gonorrhea.** The *Year 2000 Objectives for the Nation* target a reduction in black gonorrhea rates to 1100.0 per 100,000 black population. Gonorrhea rates in Tennessee minorities have declined by half from the high of 3983.3 in 1978 to 1987.3 in 1989. The estimated 1990 rate is predicted to rise to 2076.6, presaging a dramatic increase in gonorrhea. In comparison, white rates have declined over 80 percent in that same time period, with the result that minority rates in 1990 were 44.5 times higher than white rates. In 1977, this ratio was 16.0:1.

## GONNORRHEA RATES, BY RACE, TENNESSEE, 1976-1990

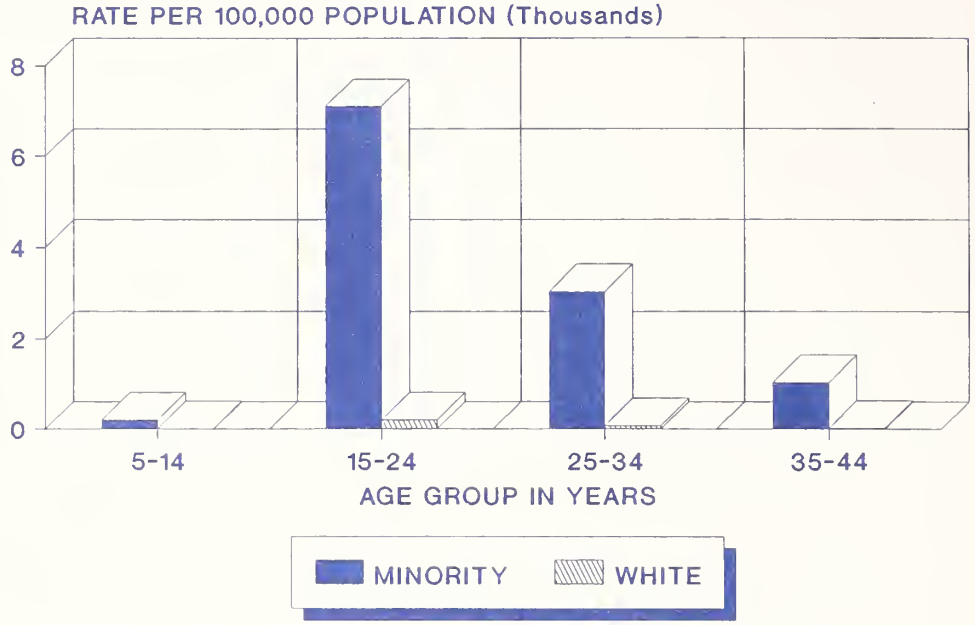



*Estimated

In 1989 and 1990, there has been a dramatic upsurge in the incidence of this disease, reversing a long-term downward trend. According to case investigators, the cause of this upsurge is presumed to be the use of sex for drugs, particularly crack cocaine.

The major center of gonorrhea incidence is in Memphis. According to the Communicable Disease Control Section approximately one out of 92 people in Memphis of all ages will contract gonorrhea this year.

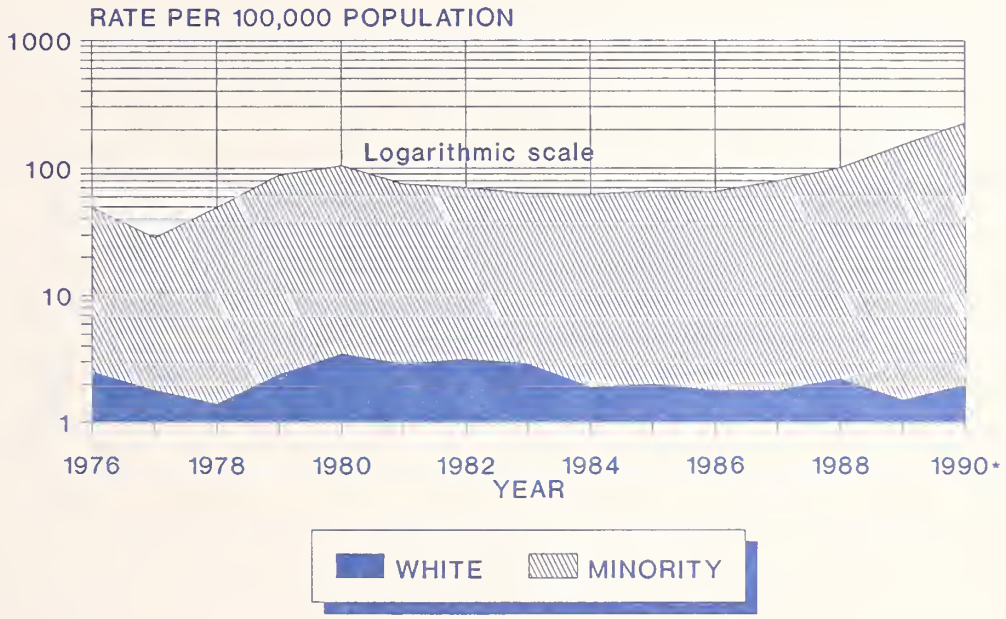
## GONORRHEA RATES BY RACE AND SELECTED AGE GROUPS, TENNESSEE, 1989



**Syphilis.** While there is no specific *Year 2000 Objective for the Nation* for syphilis rates in minorities, there is a general objective to "reduce primary and secondary [lesion] syphilis to an incidence of no more than 10 cases per 100,000 people. (Baseline [U.S.]: 16.6 in 1988)."

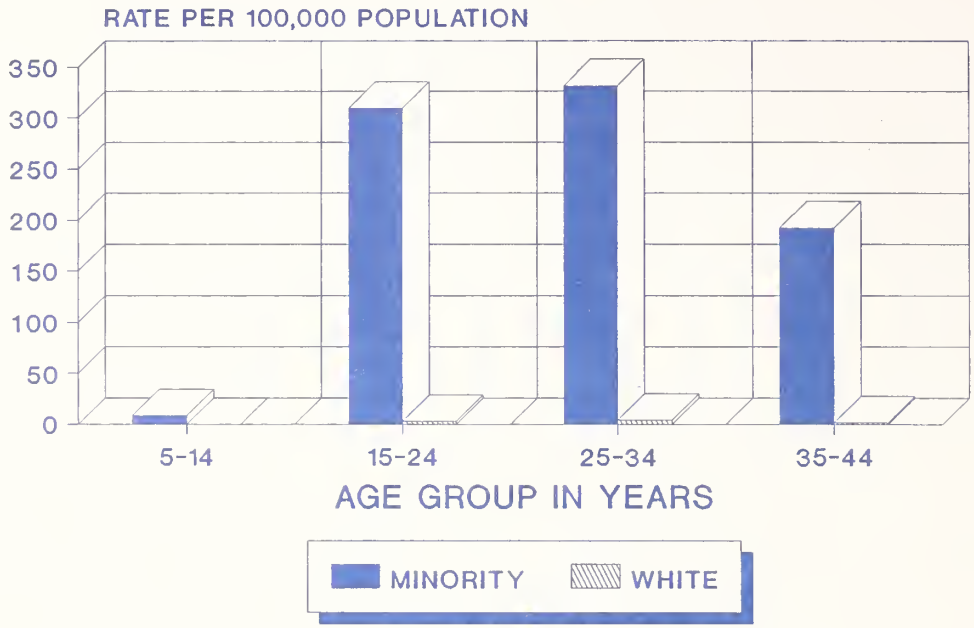
Lesion syphilis rates in minorities have risen sharply in the past four years, up from 49.9 per 100,000 population in 1976 to 152.7 in 1989 and to an estimated 224.8 in 1990, or over 100 times the corresponding white rate in that year. The 1989 minority rate was 51.2 percent higher than that of 101.0 in 1988. In addition, the 1988 rate was 26.4 percent larger than for the previous year. When the estimated 1990 rate was compared to that for 1976, the increase was 350.5 percent. As with gonorrhea, field investigators estimate the rising use of crack cocaine and the routine practice of trading sex for drugs may have affected the rise in syphilis rates. According to the Communicable Disease Control Section approximately one out of 272 people in Memphis of all ages will contract syphilis this year.

## LESION SYPHILIS RATES, BY RACE, TENNESSEE, 1976-1990




*Estimated

## LESION SYPHILIS RATES BY RACE AND SELECTED AGE GROUPS, TENNESSEE, 1989



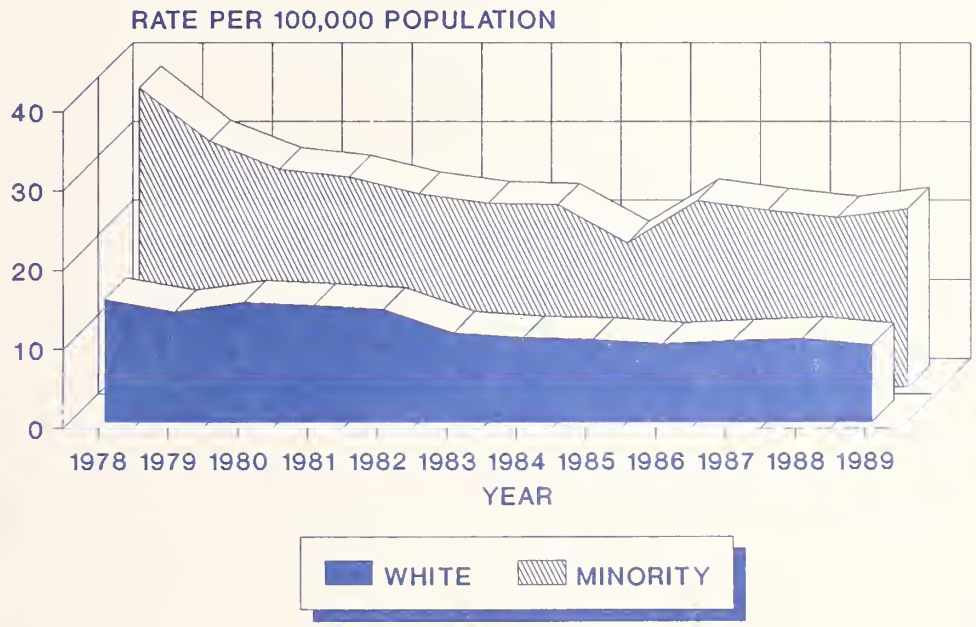
## TUBERCULOSIS

In 1989, there were 601 cases of tuberculosis reported in Tennessee; one-third or 198 of these cases were among minorities. The minority case rate of 22.5 per 100,000 population increased 5.1 percent over the rate of 21.4 in 1988.

Although the distribution of new cases by race and sex has continued almost unchanged for the past several years, the disease does not affect all Tennesseans equally. Proportionately more minorities are affected by TB than would be expected based on the population distribution. Minorities comprise less than 20 percent of the population yet encompassed 32.9 percent of the 1989 TB cases. Males and particularly minority males are at increased risk of TB.

The number of TB cases in the United States has been dropping rapidly since the 1950s. However, a recent national resurgence has been noted in at-risk populations such as the homeless, recent immigrants and other foreign-born, minorities, and HIV-positive individuals.

TUBERCULOSIS CASE RATES BY RACE, TENNESSEE, 1978-1989



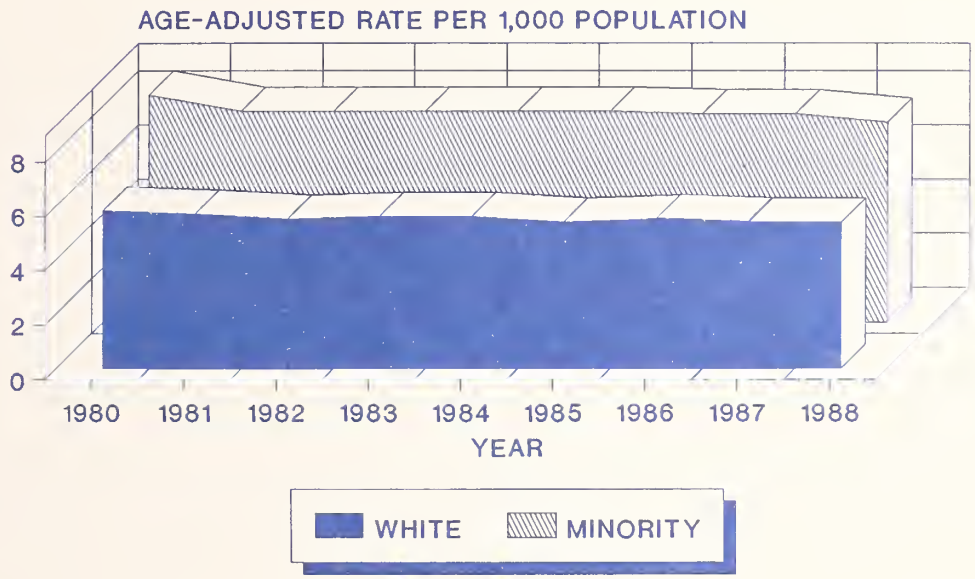
# DEATHS

## TOTAL DEATHS, ALL CAUSES

In 1980, the age-adjusted death rate for minorities was 8.4 per 1,000 population compared to 5.8 for whites, a difference of almost 45 percent. After that year, comparable white rates experienced a general, although slight, decline. The corresponding minority rate declined from 1980 to 1981, but remained constant from 1981 through 1985: 7.8. In 1986, the minority rate of 7.7 was 40.0 percent higher than the white rate. In other words, the minority death rate was 1.4 times the corresponding white rate.

Since 1986, the age-adjusted mortality rate for minorities fell to 7.4 in 1988, compared to 5.4 for whites. The differential, however, remains at 1.4.

AGE-ADJUSTED DEATH RATES BY RACE, RESIDENT DATA, TENNESSEE, 1980-1988

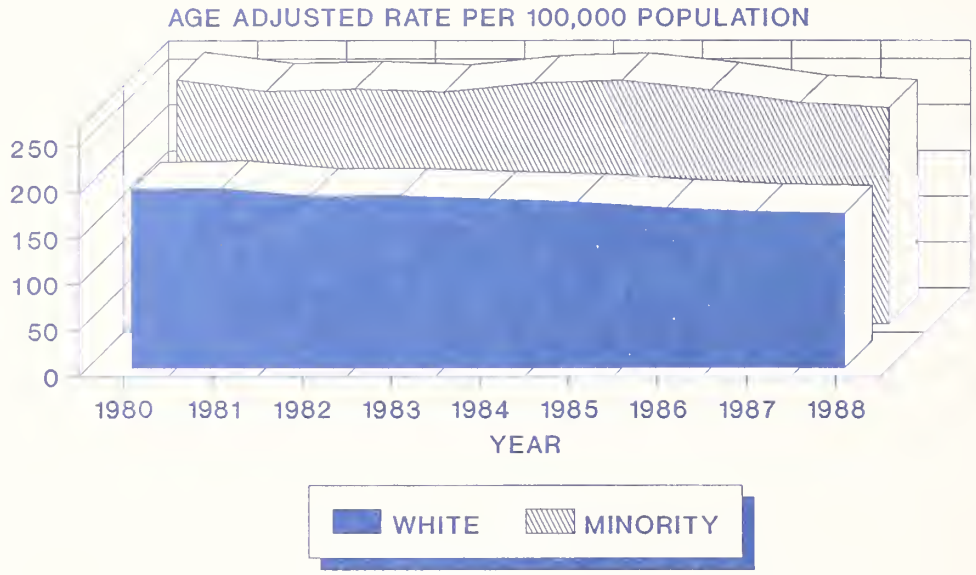


## HEART DISEASE

Heart disease was the leading cause of death among both minorities and whites in 1988. Heart disease claimed 2,496 minority Tennesseans, or one-third of all minority deaths.

Age-adjusted mortality data from 1980 through 1988 indicate that heart disease death rates for whites underwent large decreases while rates for minorities remained relatively constant. The 1988 minority rate of 236.0 per 100,000 population was 11.5 percent lower than the comparable rate for 1980, yet minority rates remained 1.4 times those of whites from 1980 through 1988.

AGE-ADJUSTED HEART DISEASE DEATH RATES, BY RACE, RESIDENT DATA, TENNESSEE, 1980-1988




Age-adjusted heart disease death rates for minorities are predicted to decline 6 percent from 1988 to 2000. Declines in risk factors such as hypertension, smoking, cholesterol levels, and obesity would improve survival from heart disease.

## CANCER

Cancer was the second leading cause of death among minority Tennessee residents in 1988, claiming 1,542 lives. Respiratory cancer was the site with the greatest number of deaths (436), followed by digestive cancer (384 deaths). Respiratory and digestive cancer constituted over half (53.2 percent) of all minority cancer deaths. According to the Surgeon General of the United States, ninety percent of lung cancer is attributed to smoking. Digestive cancer is correlated to lifestyle, especially diet. The *Year 2000 Objectives for the Nation* for cancer are:

- o Reduce breast cancer deaths to an age-adjusted death rate of no more than 25.2 per 100,000 women.
- o Reduce deaths from cancer of the uterine cervix to an age-adjusted death rate of no more than 1.5 per 100,000 women.
- o Reduce colorectal cancer deaths to an age-adjusted death rate of no more than 18.7 per 100,000 people.
- o Reduce cigarette smoking to a prevalence of no more than 18 percent among black people age 20 and older.

Among minority females in 1988, breast cancer caused 131 deaths and female genital cancer an additional 72 deaths. Colorectal cancer caused 171 minority deaths. Early detection and diagnosis can significantly reduce mortality from these cancer sites.

Age-adjusted death rates for all cancers among minorities are predicted to rise from 170.0 per 100,000 population in 1988 to 190.0 in the year 2000. Minorities are presently at 1.2 to 1.4 times the risk of death from cancer as their white counterparts.

According to *Cancer Facts & Figures for Minority Americans 1986*, blacks tend

> to underestimate the prevalence of cancer and the chances for a cure....Lower income blacks compared to higher income blacks are less likely to have regular Pap tests (52% vs 76%); are less than half as likely to have heard of proctoscopic examinations for colorectal cancer (17% vs. 43%); and are only one-third as likely to have heard of mammographic examinations for breast cancer (18% vs. 55%).
>
> These studies suggest that socioeconomic factors rather than inherent biological characteristics cause the prevailing differences between racial groups.

The report also stated that black American men have the highest incidence of prostate cancer of any race/ethnic group in the world.

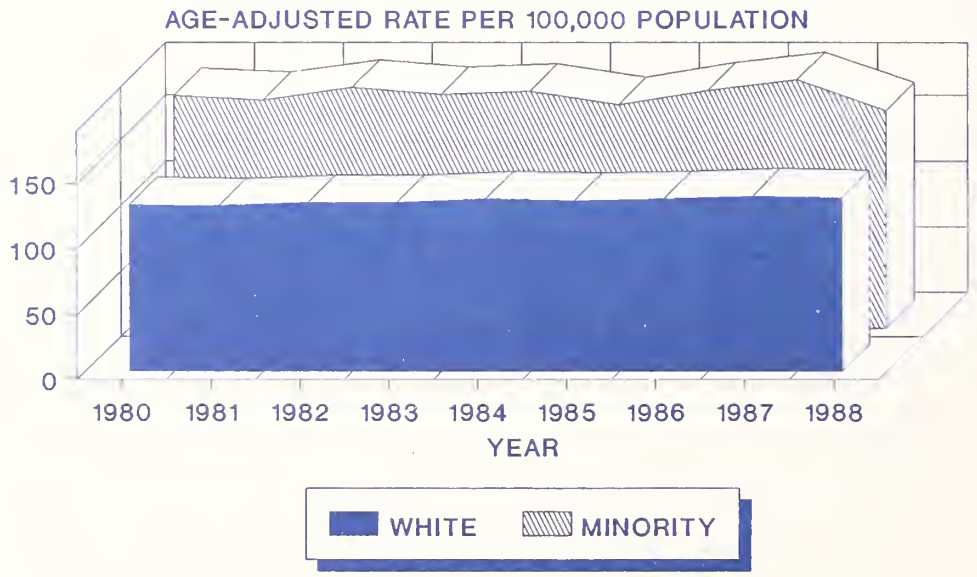
Provisional 1986 data from the Tennessee Cancer Registry indicate that blacks are diagnosed with cancer in the final stage (distant metastasis) of the disease at higher proportions than whites and that blacks are less likely to be diagnosed in the earliest stages of cancer when treatment is most efficacious. In other words, blacks generally appear less likely to heed the warning signs of cancer and to receive diagnostic screening to detect cancer in its early stages. Blacks consequently tend to suffer higher rates of mortality from the disease.

The ratio of the proportions of late cancer diagnosis in black Tennesseans when compared to their white counterparts indicates:

> Black males in Tennessee were over twice as likely as white males to be diagnosed at the final stage of cancer of the lip and oral cavity (2.3:1) and of male genital organs (2.7:1). Other sites with elevated rates of late diagnosis were digestive (1.4:1), and respiratory (1.2:1). The only site with equal rates of late diagnosis was urinary.
>
> Black Tennessee females were at increased risk of late diagnosis for lip and oral cavity (2.6:1), female breast (1.4:1), respiratory (1.3:1), urinary (1.3:1), and digestive (1.2:1). The only site with equal chance of late diagnosis for black and white females was female genital. National data indicate, however, that cervical cancer mortality among black females has been twice that for whites from 1980 through 1987, even with higher proportions of black women screened for cervical cancer than whites.

When age group of the cancer victim was examined, high rates of late stage diagnosis of breast cancer among black females aged 40-49 years were apparent from the Tennessee Cancer Registry data. Black males aged 50-89 years were at extremely high risk of late stage diagnosis of genital cancer (including prostate). These data suggest that black females beginning at age 30 years or older and black males at age 40 years or older should be targeted for intensive screening for these cancer sites.

## AGE-ADJUSTED CANCER DEATH RATES, BY RACE, RESIDENT DATA, TENNESSEE, 1980-1988

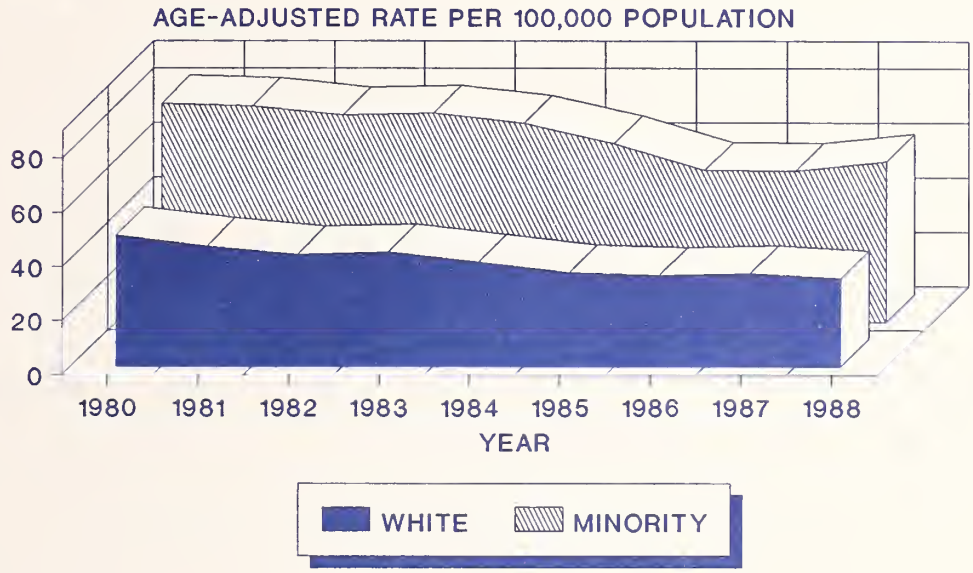


## STROKE

According to the 1985 Report of the Secretary's Task Force on Black and Minority Health, in general the highest mortality rates for stroke have been detected among black men in the Southeast United States. This ranking has led to this area being described as the "Stroke Belt."

In Tennessee, minorities are 1.6 to 1.8 times as likely to die from stroke as their white counterparts.

### AGE-ADJUSTED STROKE DEATH RATES, BY RACE, RESIDENT DATA, TENNESSEE, 1980-1988




The *Year 2000 Objectives for the Nation* state that the age-adjusted stroke death rate should be reduced to no more than 16.2 per 100,000 total population. Special target groups among the population were black men and black women. The black male death rate targeted for the year 2000 is 28.7/100,000 population; for black females, 25.0/100,000.

Age-adjusted stroke death rates per 100,000 population among minorities have declined from 1976 through 1987, with a slight rise in 1988. The 1988 age-adjusted rate of 70.0 was 40 percent lower than the comparable rate in 1976.

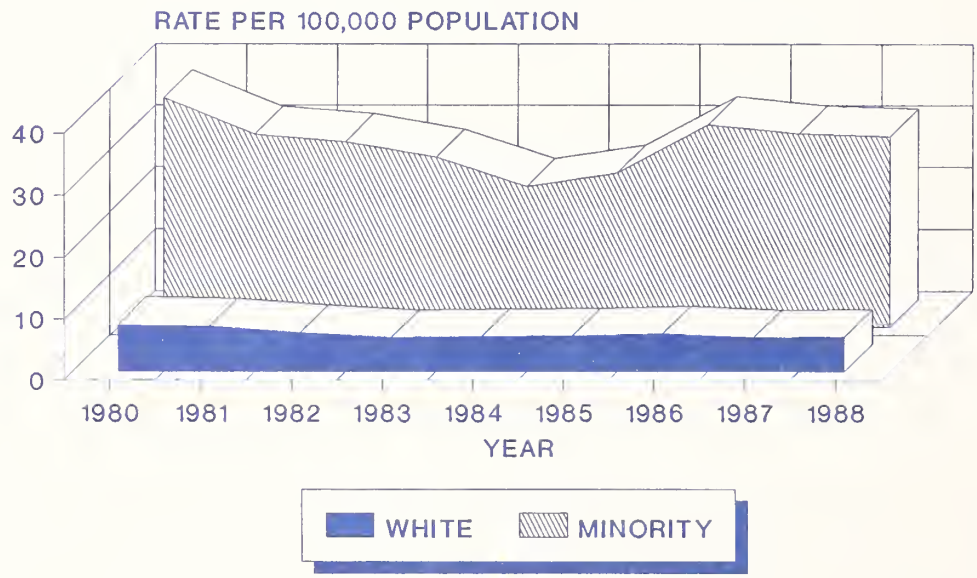
## HOMICIDE

According to the 1985 Report of the *Secretary's Task Force on Black and Minority Health,* a black male has a 1 in 21 lifetime chance of becoming a homicide victim. The chance for white males is 1 in 131. Shelby County and Davidson County have the highest homicide rates in the state.

The *Year 2000 Objectives for the Nation* state that homicide rates for black men aged 15-34 years should be reduced to 16 per 100,000 population by the year 2000. Nationally, the rate was 91.6 in 1986 while the Tennessee rate was 99.7.

In 1989, over two-thirds (68.1 percent) of all minority male homicide victims aged 15-24 years were Shelby County residents. This percentage is greater than that of 55.6 percent in 1987 and of 62.7 percent in 1988.

AGE-ADJUSTED HOMICIDE DEATH RATES,
BY RACE, RESIDENT DATA,
TENNESSEE, 1980-1988



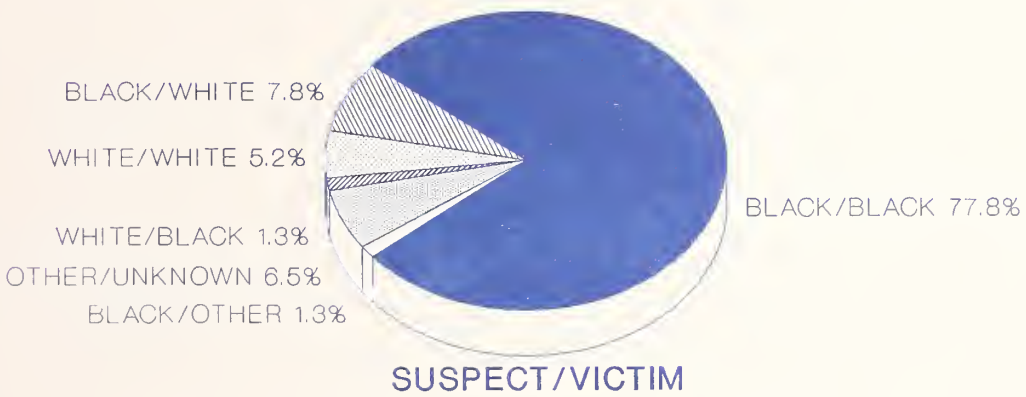
## MEMPHIS POLICE DEPARTMENT HOMICIDE DATA

In 1989, there were 156 homicides reported to the Memphis Police Department, down from 181 in 1988. Eleven of the 1989 homicides were ruled justifiable (self-defense, etc.); 145 were ruled criminal homicides, compared to 175 in 1988.

In three-fourths of all homicides, the offender and the victim were related or were acquaintances. One out of six involved drugs.

On average, almost three-fourths of homicides in 1988 and 1989 were committed by black males. Half involved both black male suspects and black male victims.

### PERCENT DISTRIBUTION OF HOMICIDE DEATHS BY RACE OF SUSPECT AND VICTIM, MEMPHIS, 1989

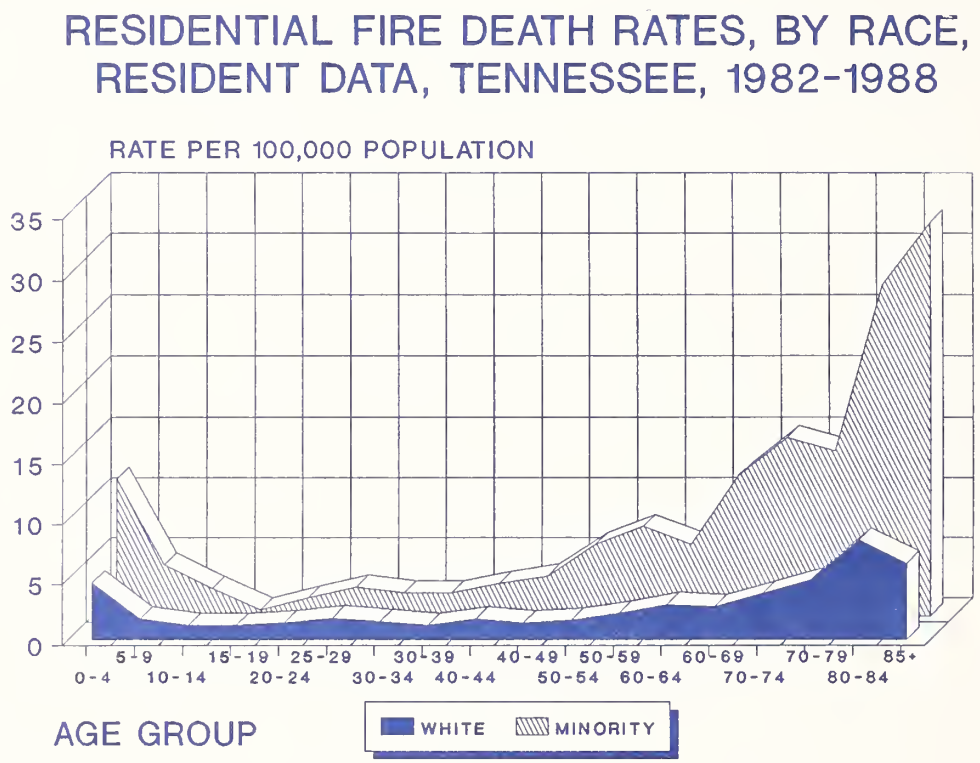


## FATAL RESIDENTIAL FIRES

Mortality from fires in homes affects minorities more than whites. During the years 1982 through 1988, race-specific death rates per 100,000 population were higher for minorities in all age groups than rates for their white counterparts. During that time period, minority children and the elderly suffered the greatest racial disparity in fire-related death rates.

For children aged 0-4 years, the ratio of minority to white fire-related rates of mortality was 2.4:1, or 11.4 compared to 4.7 per 100,000 population for whites.

For the elderly, the disparity was even greater, ranging from 4 to 1 in those aged 65-69 years, up to 5 to 1 in those aged 85 years and older.

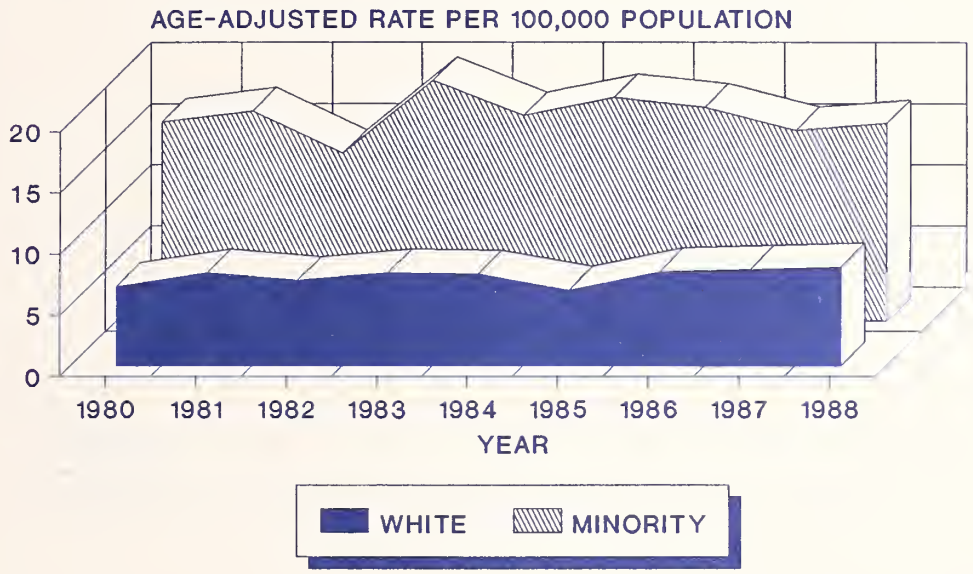


## DIABETES MELLITUS

According to the 1985 *Report of the Secretary's Task Force on Black and Minority Health,* nationally the prevalence of diabetes is one-third higher in blacks than in whites, and it is 50 percent greater in black females than in white females. In addition, research cited in the Heckler Report suggests that 4.7 percent of adult black females and 3.7 percent of adult black males have undiagnosed diabetes.

Age-adjusted mortality rates for diabetes in minorities are over two times that for whites. The 1988 minority diabetes mortality rate was essentially unchanged from the corresponding rate in 1980.

DIABETES DEATH RATES BY RACE, RESIDENT DATA, TENNESSEE, 1980-1988



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| Cocaine-related deaths | Division of Information Resources, Tennessee Department of Health and Environment |
| AIDS | AIDS Section, Tennessee Dept. of Health and Environment |
| MATERNAL AND CHILD HEALTH | |
| Year 2000 Objectives | Promoting Health/Preventing Disease: Year 2000 Objectives for the Nation, (draft), Public Health Service, U.S. Dept. of Health and Human Services |
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| Teenage pregnancy | Bureau of Health Services, and Division of Information Resources, Tennessee Department of Health and Environment |
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| Alcohol consumption during pregnancy | Division of Information Resources, Tennessee Department of Health and Environment |
| Smoking during pregnancy | Division of Information Resources, Tennessee Department of Health and Environment |
| Drug use during pregnancy | Division of Information Resources, Tennessee Department of Health and Environment |
| Weight gain during pregnancy | Division of Information Resources, Tennessee Department of Health and Environment |
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| Low birthweight | Report of the Secretary's Task Force on Black and Minority Health, U.S. Dept. of Health and Human Services, and |

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| Special Supplemental Food Program | Nutrition Services, Tennessee Department of Health and Environment |
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| HEALTH MANPOWER | |
| Minority representation in Southern medical schools | Southern Regional Education Board, and Association of American Medical Colleges |
| Minority representation in Tennessee health resources | Tennessee Higher Education Commission, and Division of Information Resources, Tennessee Department of Health and Environment |
| DISEASES | |
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| Renal disease and hypertension in blacks | Renal Disease Program, Tennessee Department of Health and Environment |
| Sexually transmitted diseases | Communicable Disease Control, Department of Health and Environment |
| Tuberculosis | Tuberculosis Control, Tennessee Department of Health and Environment |
| DEATHS | Division of Information Resources, Tennessee Department of Health and Environment |

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